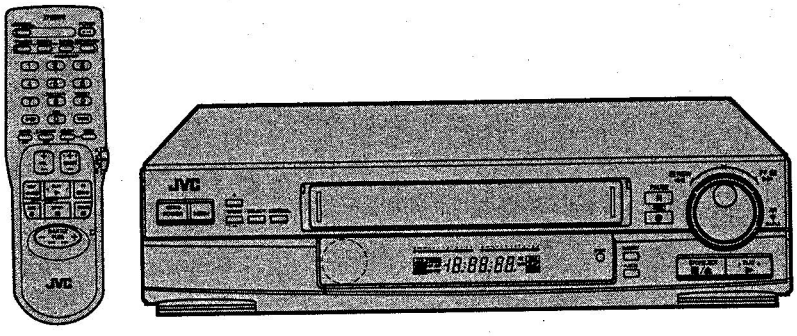
JVC

VIDEO CASSETTE RECORDER

HR-S5200U/S7200U



VCR Plus+ C3 w/Cable Channel Changer

Hi-Fi

S-VHS

SPECIFICATIONS *(The specification shown pertain specifically to the model HR-S5200U)*

GENERAL

Power requirement		: AC 120 V~, 60 Hz
Power consumption		: 26 W
Temperature		
Operating		: 5°C to 40°C (41°F to 104°F)
Storage		: –20°C to 60°C (–4°F to 140°F)
Operating position		: Horizontal only
Dimensions (WxHxD)		: 400 x 94 x 340 mm (15-3/4" x 3-3/4" x 13-7/16")
Weight		: 4.5 kg (10.0 lbs)
Format		: S-VHS/VHS NTSC standard with Hi-Fi audio
Maximum recording time	(SP)	: 160 min. with T-160 video cassette
	(EP)	: 480 min. with T-160 video cassette

VIDEO/AUDIO

Signal system	: NTSC-type color signal and EIA monochrome signal, 525 lines/60 fields
Recording/Playback system	: DA-4 (Double Azimuth) head helical scan system
Signal-to-noise ratio	: 45 dB
Horizontal resolution	: 400 lines (S-VHS) 240 lines (VHS)
Frequency range	: 70 Hz to 10,000 Hz (Normal audio) 20 Hz to 20,000 Hz (Hi-Fi audio)
Input/Output	: RCA connectors (IN x 2, OUT x 1)

TUNER

Tuning system		: Frequency synthesized tuner
Channel coverage		
	(VHF)	: Channels 2–13
	(UHF)	: Channels 14–69
	(CATV)	: 113 Channels
RF output		: Channel 3 or 4 (switchable; preset to Channel 3 when shipped) 75 ohms, unbalanced

TIMER

Clock reference	: Quartz
Program capacity	: 1-year programmable timer/ 8-programs
Memory backup time	: Approx. 60 min.

ACCESSORIES

Provided accessories	: RF cable (F-type), Infrared remote control unit, "AAA" battery x 2, Cable Box Controller, S-Video cable (4-pin), Audio/Video cable, Mini-plug cable

Specifications shown are for SP mode unless otherwise specified.
E. & O.E. Design and specifications subject to change without notice.

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INSTRUCTIONS

Safety Precautions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

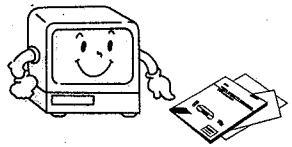
WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION:
This video cassette recorder should be used with AC 120V~, 60 Hz only.
To prevent electric shocks and fire hazards, do NOT use any other power source.

CAUTION:
TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION:
POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

NOTE:
- When you are not using the video recorder for a long period of time, it is recommended that you disconnect the power cord from the AC outlet.
- Changes or modifications not approved by JVC could void user's authority to operate the equipment.
- The rating plate and the safety caution are on the rear and/or side of the unit.
- Please read the "Precautions" section of this instruction manual and the "Video Products Safety Guide" enclosed with this manual before installing or operating the VCR.
- This instruction manual, and the other reference materials enclosed with it, contain important information on VCR operation and proper usage. Please keep them near your VCR in a place where you can easily access them for reference.
- It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable program and in any literary, dramatic, musical, or artistic work embodied therein.



How To Use This Instruction Manual

This instruction manual begins with an introductory section, "Getting To Know Your VCR", followed by necessary set-up procedures in "Setting Up Your VCR". The next five sections —"Playback", "Recording", "Timer-Recording with VCR Plus+", "Timer-Recording without VCR Plus+" and "Special Features" — take you step-by-step through these operations of your VCR. "Editing" introduces you to your VCR's editing features. "If You Have Any Questions" is the section you should refer to if you experience any problems in VCR operation or if you need additional information regarding a feature or terminology. At the end of the book you will find "Warranty" information and the locations you can contact "For Servicing".

Throughout the book, if you ever need to refer to another page for instructions or information, you will be told so by a ☞ mark pointing to the page number.

Unless otherwise specified, operation buttons mentioned in the instructions refer to those located on the remote control, not those duplicated on the VCR.

Remember, you must use your VCR correctly to fully enjoy it. Please use this manual effectively. It's the surest and quickest way to unlock the full potential of your new JVC VCR.

S-VHS

■ Cassettes marked "S-VHS" and "VHS" can be used with this video cassette recorder. However, S-VHS recordings are possible only with cassettes marked "S-VHS".

VCR Plus+ and PlusCode are trademarks of Gemstar Development Corp. VCR Plus+ system is manufactured under licence from Gemstar Development Corporation.

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Some of your VCR's features

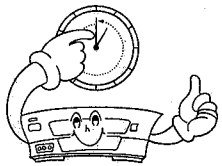
Instant ReView ☞ p. 22

Quick accesss to your recordings! At the touch of a button, this function automatically turns on the VCR, rewinds the tape, searches for the beginning of your recorded program, and starts playback.

VCR Plus+ Programming ☞ p. 28

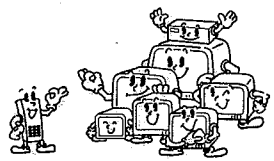
Easy timer programming—just punch-in the code number in your TV listing.

Auto Daylight Saving Time ☞ p. 11



Automatic adjustment of the VCR's clock for Daylight Saving Time.

TV and Cable Box Multi-Brand Remote Control ☞ p. 33



Compatible with most major brands of televisions and Cable Boxes for basic control functions. Puts an end to two-handed remote control.

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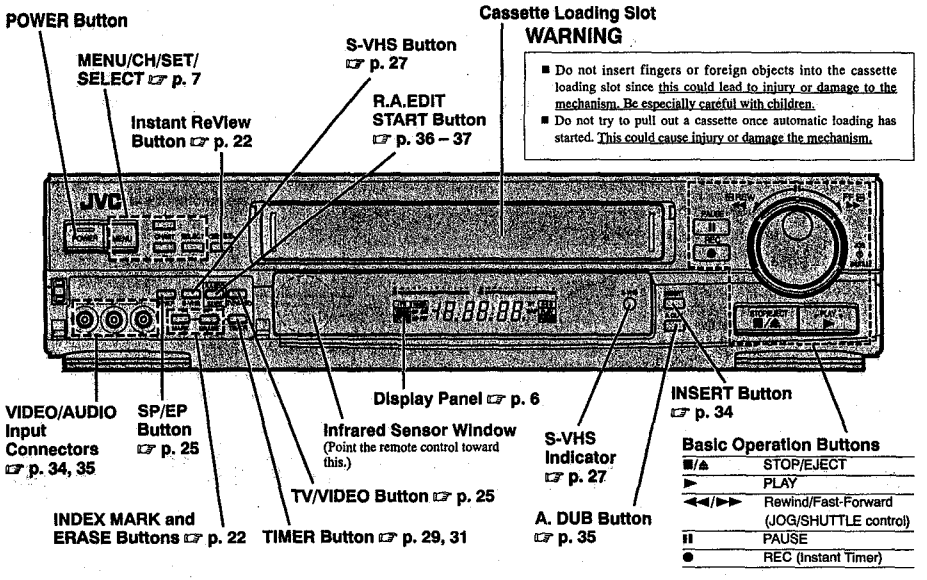
Getting To Know Your VCR

Front Panel

To open the front cover, push the left upper end where labelled "PUSH-OPEN".


POWER Button
MENU/CH/SET/ SELECT ☞ p. 7
Instant ReView Button ☞ p. 22
S-VHS Button ☞ p. 27
R.A.EDIT START Button ☞ p. 36 – 37
Cassette Loading Slot
WARNING
■ Do not insert fingers or foreign objects into the cassette loading slot since this could lead to injury or damage to the mechanism. Be especially careful with children.
■ Do not try to pull out a cassette once automatic loading has started. This could cause injury or damage the mechanism.
VIDEO/AUDIO Input Connectors ☞ p. 34, 35
SP/EP Button ☞ p. 25
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Infrared Sensor Window (Point the remote control toward this.)
S-VHS Indicator ☞ p. 27
INSERT Button ☞ p. 34
Basic Operation Buttons
■/▲ STOP/EJECT
► PLAY
◄◄/►► Rewind/Fast-Forward (JOG/SHUTTLE control)
II PAUSE
● REC (Instant Timer)
TV/VIDEO Button ☞ p. 25
INDEX MARK and ERASE Buttons ☞ p. 22
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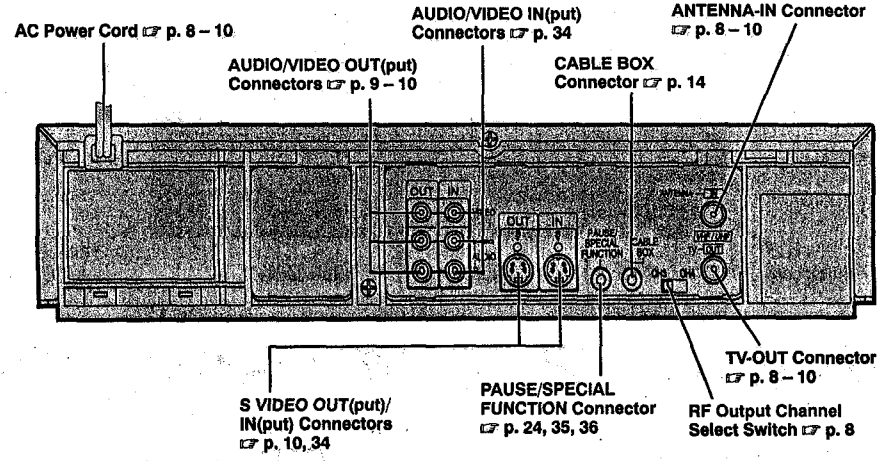
A. DUB Button ☞ p. 35

Back Panel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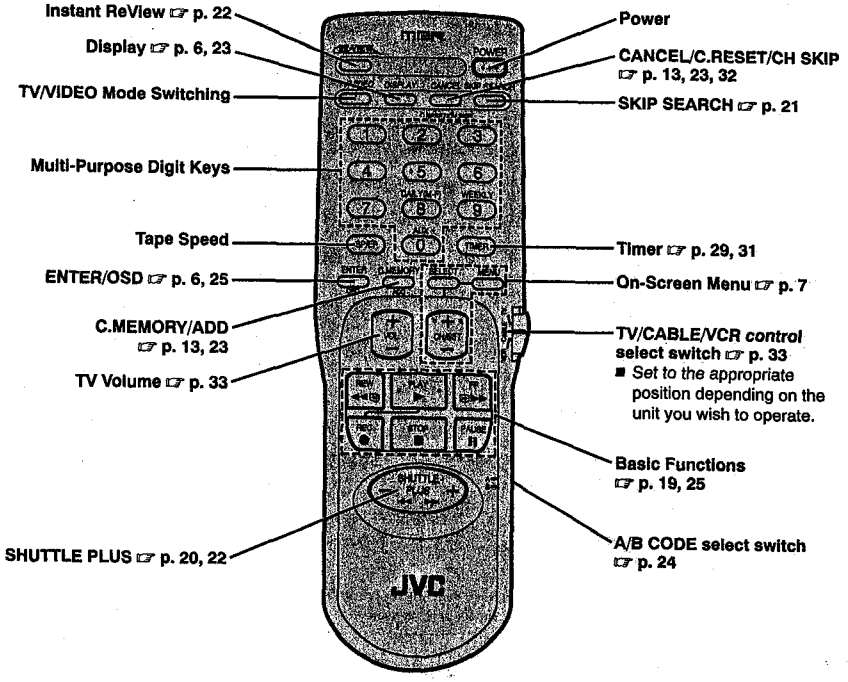
RF Output Channel Select Switch ☞ p. 8

Wireless Remote Control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TV/VIDEO Mode Switching
Multi-Purpose Digit Keys
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ENTER/OSD ☞ p. 6, 25
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SHUTTLE PLUS ☞ p. 20, 22
Power
CANCEL/C.RESET/CH SKIP ☞ p. 13, 23, 32
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■ Set to the appropriate position depending on the unit you wish to operate.
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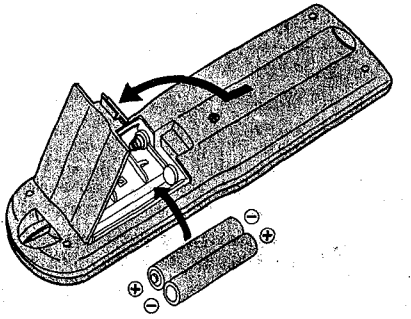
A/B CODE select switch ☞ p. 24



Installing Batteries

1. Slide the battery compartment cover in the direction of the arrow.
2. Insert 2 "AAA"-size batteries (provided) in the correct directions.
3. Replace the cover.

How To Use

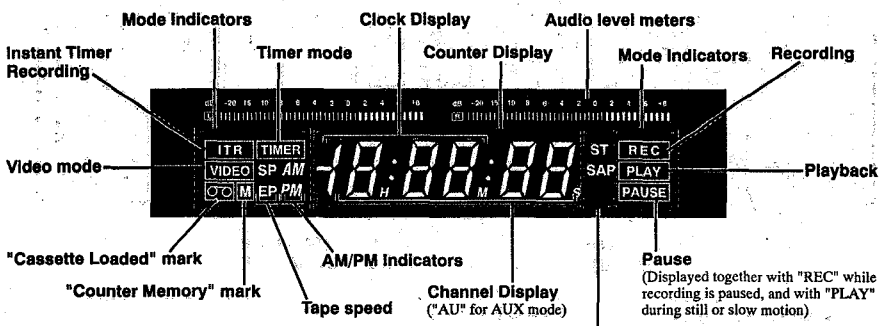
This remote control can operate most of your VCR's functions.
Set the TV/CABLE/VCR switch to the VCR position.

1. Point the remote control toward the VCR's sensor window.
2. Press the appropriate operation button.
   ■ The maximum operating distance of the remote control is about 8 m (26 ft).

This remote control can also operate various brands of TVs and Cable Boxes. For instructions, ☞ p. 33.

Getting To Know Your VCR (cont'd)

Display Panel

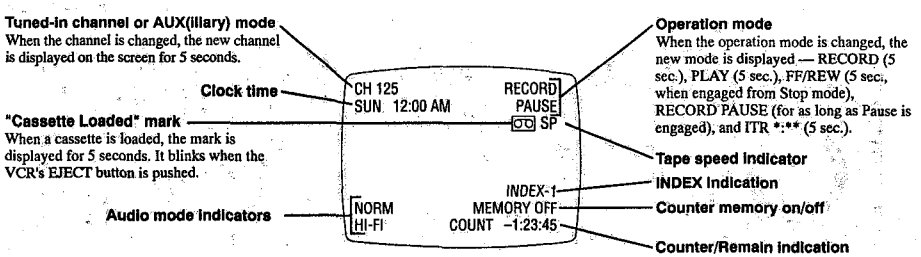


- Pressing DISPLAY lets you change the type of display: Counter, Channel*, Clock or Remain.
- Whenever the VCR is turned off, the FDP's brightness is automatically dimmed.

* Channel is not displayed during playback.

On-Screen Mode Superimpose

- The superimposed indication on the TV screen tells you what the VCR is doing.


Tuned-in channel or AUX(iliary) mode
When the channel is changed, the new channel is displayed on the screen for 5 seconds.
Clock time
"Cassette Loaded" mark
When a cassette is loaded, the mark is displayed for 5 seconds. It blinks when the VCR's EJECT button is pushed.
Audio mode indicators
CH 125
SUN 12:00 AM
RECORD
PAUSE
SP
INDEX-1
NORM
HI-FI
MEMORY OFF
COUNT -1:23:45
Operation mode
When the operation mode is changed, the new mode is displayed — RECORD (5 sec.), PLAY (5 sec.), FF/REW (5 sec., when engaged from Stop mode), RECORD PAUSE (for as long as Pause is engaged), and ITR *:** (5 sec.).
Tape speed indicator
INDEX indication
Counter memory on/off
Counter/Remain indication

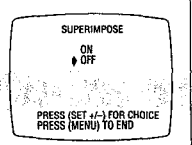
To recall an indication

1. Press ENTER/OSD.
   - All indications corresponding to the current status are displayed for 5 seconds, leaving the counter information on the screen.
2. Press ENTER/OSD again to clear the display.

To stop the on-screen indications from being shown

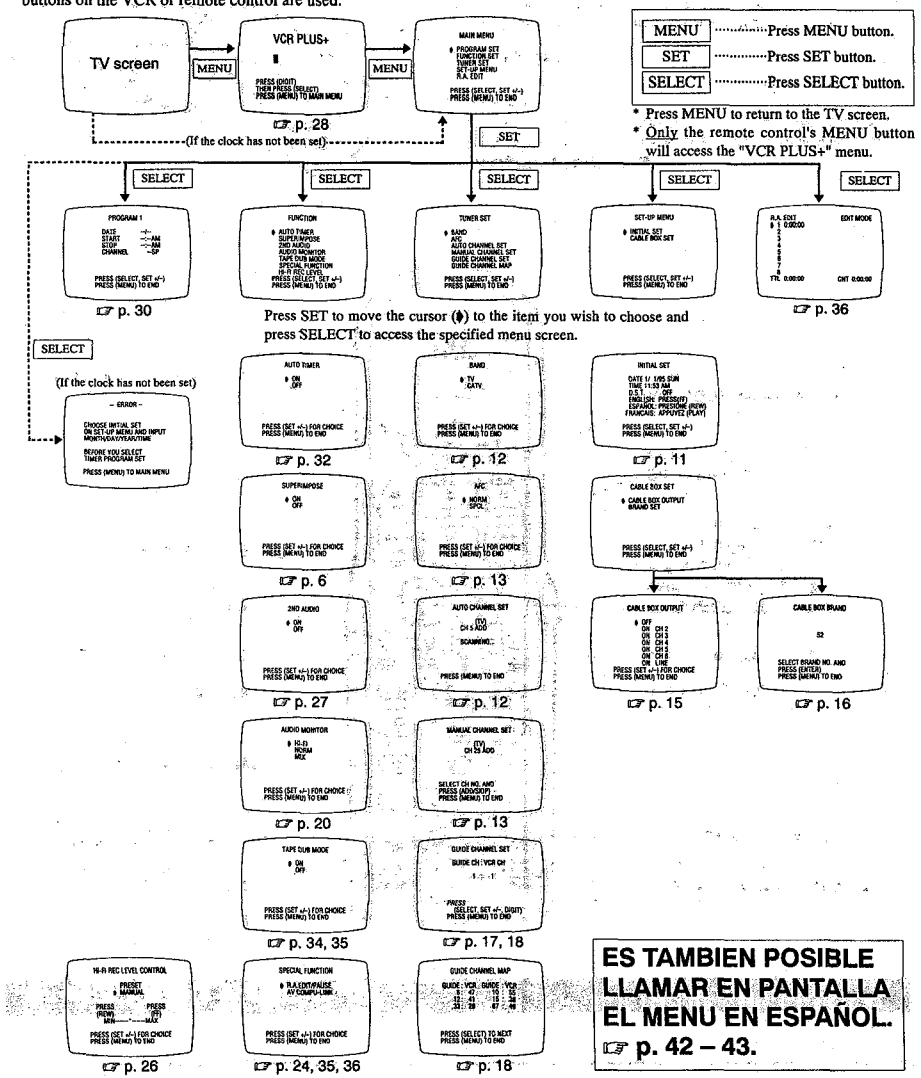
When you do not want to show the indications – for example when you dub a tape to another VCR (using this VCR as the player), set SUPERIMPOSE to OFF.

1. Press MENU, SET and SELECT to access the "SUPERIMPOSE" screen. ☞ p. 7
2. Press SET to Choose OFF.
3. Press MENU as many times as necessary to exit.
   - Setting is completed, and a normal TV screen is displayed.



On-Screen Menus and Displays

- You can set the clock, tuner, timer, and other functions using the on-screen menu. For this, the MENU, SET+/– and SELECT buttons on the VCR or remote control are used.



ES TAMBIEN POSIBLE LLAMAR EN PANTALLA EL MENU EN ESPAÑOL.
☞ p. 42 – 43.

Setting Up Your VCR

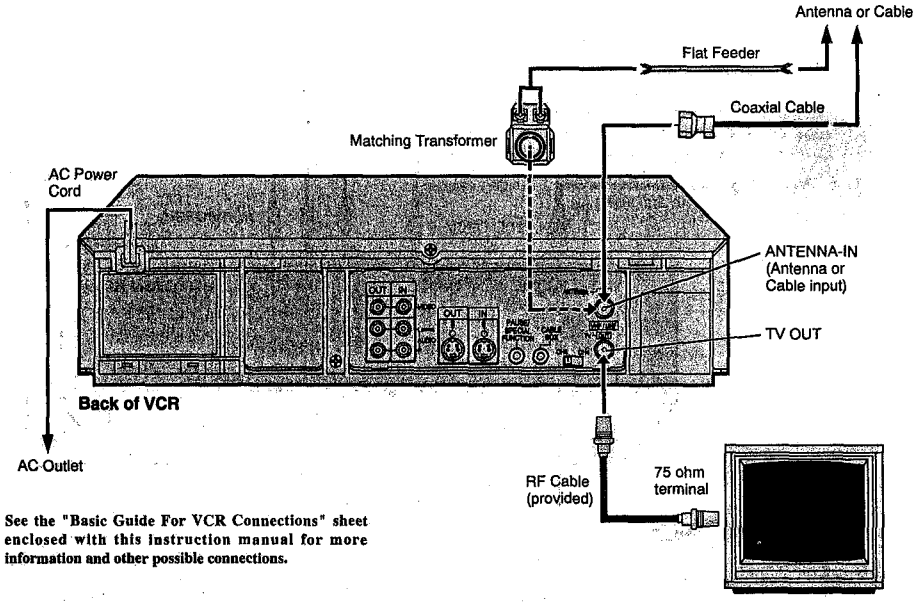
Making the right connections

It's essential that your VCR be properly hooked up for proper results. Follow these steps carefully. THESE STEPS MUST BE COMPLETED BEFORE ANY VCR OPERATION CAN BE PERFORMED.

IF YOU HAVE A STANDARD TV SET

RF CONNECTION

1. Disconnect the TV antenna from the TV.
2. Connect the TV antenna to the VCR's ANTENNA-IN.
3. Connect the VCR's TV OUT to the TV's antenna terminal using the provided RF cable.

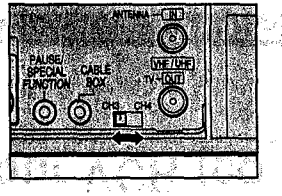


See the "Basic Guide For VCR Connections" sheet enclosed with this instruction manual for more information and other possible connections.

SELECT VCR CHANNEL (3 OR 4)

With a standard RF connection, the VCR sends picture and sound signals through the connecting cable to your TV on channel 3 or 4. The VCR's switch is pre-set to CH3 prior to shipment. Set this switch to CH4 in areas where channel 3 is used for broadcasting.

Back of VCR



NOTES:

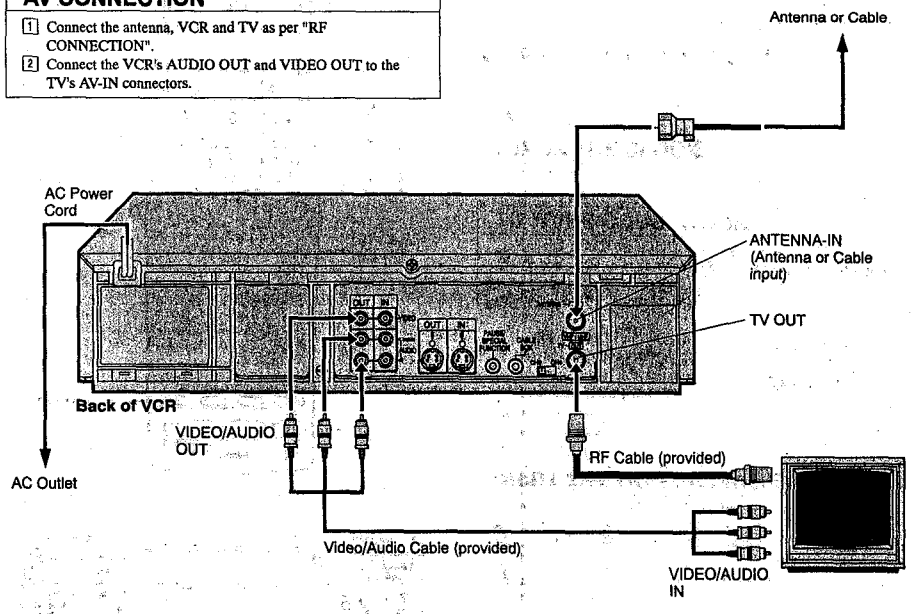
- To operate the VCR with your TV using an RF connection, it is always necessary to set your TV's channel to the one you set the VCR to in this step.
- Even if your TV is connected using AV input connectors, it is necessary to also connect your VCR and TV using the RF cable if you ever wish to watch a program while recording another (☞ p. 25).

Or...

IF YOU HAVE A TV SET WITH AV INPUT CONNECTORS

AV CONNECTION

1. Connect the antenna, VCR and TV as per "RF CONNECTION".
2. Connect the VCR's AUDIO OUT and VIDEO OUT to the TV's AV-IN connectors.



ADJUST RF SETTING IF NECESSARY

Even if your TV is connected to AV input connectors, it is necessary to also connect your VCR and TV using the RF cable if you ever wish to watch a program while recording another (☞ p.25).

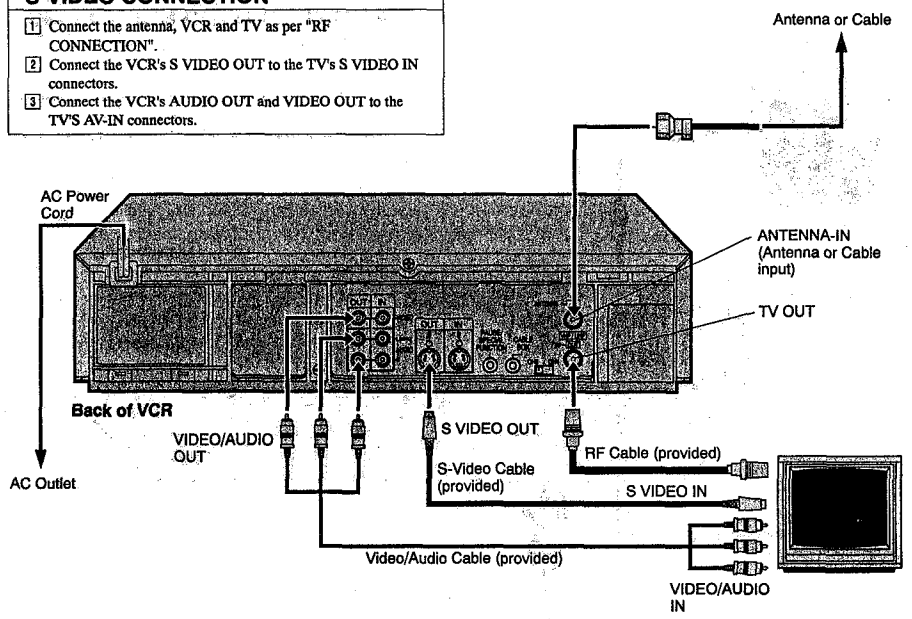
Setting Up Your VCR (cont'd)

Or...

IF YOU HAVE A TV SET WITH S-VIDEO INPUT CONNECTORS

S-VIDEO CONNECTION

1. Connect the antenna, VCR and TV as per "RF CONNECTION".
2. Connect the VCR's S VIDEO OUT to the TV's S VIDEO IN connectors.
3. Connect the VCR's AUDIO OUT and VIDEO OUT to the TV'S AV-IN connectors.



NOTES:

- To make the most of Super VHS picture performance, we recommend you use the S-VIDEO connection.
- To operate the VCR with your TV using the S VIDEO connection, set your TV to the AV mode.

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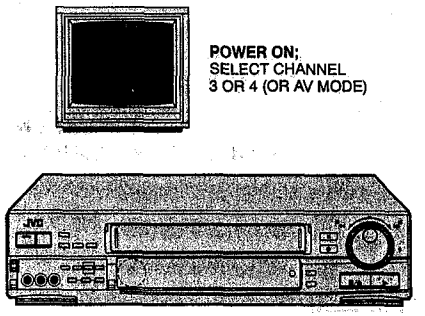
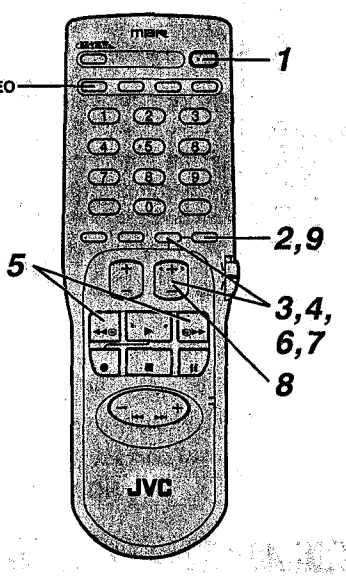
Setting your VCR's clock

Since your VCR bases all of its timer recording start and stop "decisions" on the time kept by its built-in clock, accurate setting of this clock is crucial for proper timer-recording results.



POWER ON;
SELECT CHANNEL
3 OR 4 (OR AV MODE)



You can also use the POWER, MENU, REW, FF, SET and SELECT buttons on the VCR.

TURN ON THE VCR

1 Press POWER.
- If watching on channel 3 or 4, press TV/VIDEO to select the VIDEO mode. The VCR's VIDEO indicator will light.

ACCESS THE ON-SCREEN MENU

2 Press MENU.
- The Main Menu screen will appear.
- If the VCR Plus+ screen appears press MENU again.

3 Press SET to move the cursor to "SET-UP MENU" and then press SELECT.

4 Press SET to move the cursor to "INITIAL SET", and then press SELECT.

5 You can change the on-screen language.
Press REW for Spanish, PLAY for French.
- Press FF to change back to English.

SET-UP MENU
▸INITIAL SET
CABLE BOX SET
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

INPUT THE MONTH/DAY/YEAR/TIME

6 Press SET to set the month, and then press SELECT.

7 Repeat step 6 to set the day, year and time (making sure that AM or PM is correct).
- The day of the week will automatically appear.

INITIAL SET
DATE 2/23/95 THU
TIME 12:00 AM
D.S.T. OFF
ENGLISH : PRESS (FF)
ESPAÑOL : PRESIONE (REW)
FRANCAIS : APPUYEZ (PLAY)
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

TO USE AUTO D.S.T.

8 If you want to take advantage of Auto D.S.T. (Daylight Saving Time) (see below), press SET to choose ON.

TO MAKE CORRECTIONS

Press SELECT so that the item you want to change blinks. Reset that item. Continue to step 9.

START THE CLOCK

9 Press MENU.

Auto Daylight Saving Time

Your VCR is incorporated with the D.S.T. function which automatically adjusts the clock at the start/end of Daylight Saving Time, making manual re-setting unnecessary.

When D.S.T. is set to ON:

- On the first Sunday of April, 1 minute after 1:59AM the VCR's clock is adjusted to 3:00AM.
- On the last Sunday of October, 1 minute after 1:59AM the VCR's clock is adjusted to 1:00AM.

- If you live in an area without Daylight Saving Time, keep D.S.T. OFF when setting the clock.

Setting Up Your VCR (cont'd)

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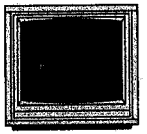
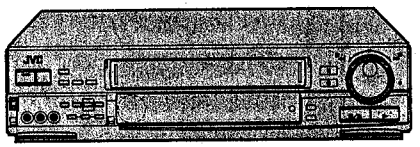
Setting your VCR's tuner

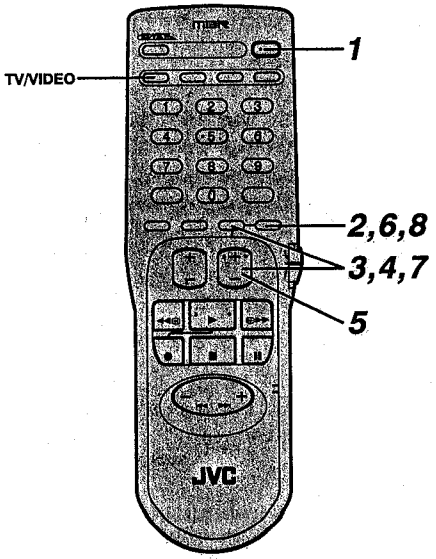
FOLLOW INSTRUCTIONS ON THIS PAGE OR ON P. 14 – 16 DEPENDING ON YOUR CABLE BOX.

The Auto Set feature introduced here automatically assigns receivable channels in your area to the CHANNEL UP/DOWN buttons and skips the others so you won't have to go through any "blank" channels to get to the one you want.



POWER ON;
SELECT CHANNEL
3 OR 4 (OR AV MODE)





You can also use the POWER, MENU, SET and SELECT buttons on the VCR.

TURN ON THE VCR

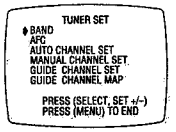
1 Press POWER.
- If watching on channel 3 or 4, press TV/VIDEO to select the VIDEO mode. The VCR's VIDEO indicator will light.

ACCESS THE ON-SCREEN MENU

2 Press MENU to access the Main Menu screen.
- If the VCR Plus+ screen appears press MENU again.

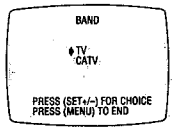
3 Press SET to move the cursor to "TUNER SET", and then press SELECT.

4 Press SET to move the cursor to "BAND", and then press SELECT.



SELECT THE BAND

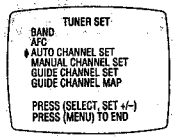
5 Press SET to choose "TV" or "CATV".
- The BAND select feature has 2 settings (TV and CATV). Set to TV if your antenna provides only UHF and VHF channels. Set to CATV if your antenna system is a cable TV line.

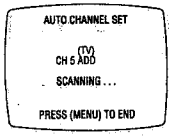


6 Press MENU.

START AUTO SET

7 Press SET to move the cursor to "AUTO CHANNEL SET", and then press SELECT.
- Auto set is in progress and "SCANNING..." is displayed.
- When available channels are scanned, "ADD" will be displayed on the screen.
- When unavailable channels are skipped, "SKIP" will be displayed.
- After completion of auto set, the lowest tuned-in channel number and "SCAN COMPLETED" are displayed.
- If "SCAN COMPLETED — NO SIGNAL —" is displayed, check the band setting and connections, and start again. ☞ p. 8 – 10.

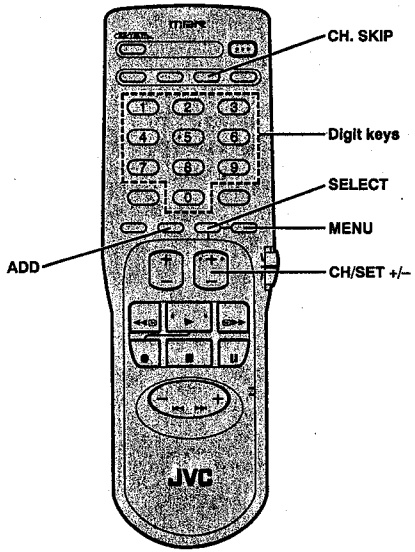




RETURN TO THE TV SCREEN

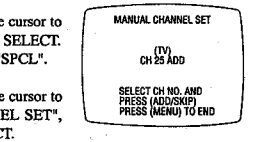
8 Press MENU as many times as necessary to exit.

Now go to ☞ p. 17 "Setting up the VCR Plus+ feature".



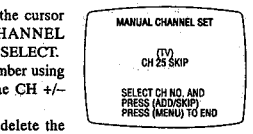
To add a "skipped" channel to your VCR's tuner

1. Press MENU to access the Main Menu screen.
   - If the VCR Plus+ screen appears press MENU again.
2. Press SET to move the cursor to "TUNER SET", and then press SELECT.
3. Press SET to move the cursor to "AFC", and then press SELECT.
4. Press SET to choose "SPCL".
5. Press MENU.
6. Press SET to move the cursor to "MANUAL CHANNEL SET", and then press SELECT.
7. Input the channel number using the Digit keys.
8. Press ADD to store the channel.
9. Specify another channel number or press MENU as many times as necessary to exit.



To delete an unwanted channel from your VCR's tuner

1. Press MENU to access the Main Menu screen.
   - If the VCR Plus+ screen appears press MENU again.
2. Press SET to move the cursor to "TUNER SET", and then press SELECT.
3. Press SET to move the cursor to "MANUAL CHANNEL SET", and then press SELECT.
4. Input the channel number using the Digit keys or the CH +/– buttons.
5. Press CH. SKIP to delete the channel.
6. Specify another channel number or press MENU as many times as necessary to exit.



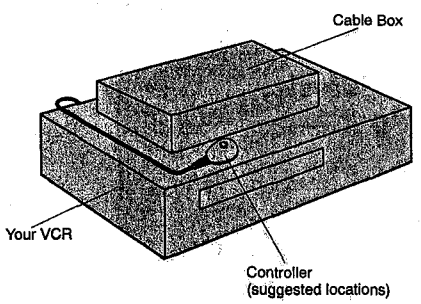
Setting Up Your VCR (cont'd)

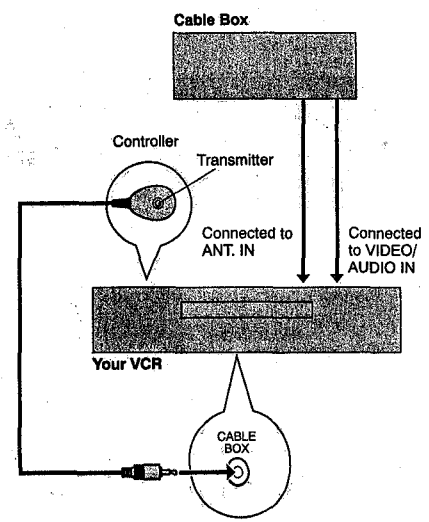
Setting your VCR's tuner and Cable Box Controller

Follow these steps **if you use an external Cable Box** (descrambler) to receive cable stations. When properly set-up, the Multi-System Cable Box Controller will automatically switch channels on your Cable Box so you can timer-record two or more cable TV stations. It works for Cable TV shows that have been programmed using VCR Plus+ (☞ p. 28) or On-Screen (☞ p. 30) programming.

Suggested Locations

Attach to top of VCR with Controller's transmitter pointed towards Cable Box's remote sensor window.





PLACE CONTROLLER IN A GOOD LOCATION

1 Find a location for the Controller which offers an unobstructed path to the Cable Box's remote sensor window; otherwise the Controller's infrared beam will not be able to reach and control your Cable Box.

2 Attach the Controller using the supplied adhesive strips.

CONNECT CABLE BOX TO VCR

If your Cable Box has VIDEO OUT/AUDIO OUT connectors...

3 Connect them to the VIDEO IN and AUDIO IN connectors of your VCR.

If your Cable Box does not have VIDEO OUT/AUDIO OUT connectors...

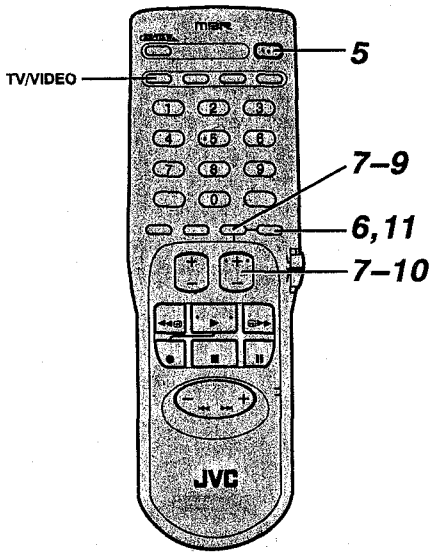
3 Connect the Cable Box's antenna output terminal to the ANT. IN (Antenna) terminal of your VCR.
- Refer to the Cable Box's instruction manual for more information.

CONNECT CONTROLLER TO VCR

4 Connect the Cable Box Controller to your VCR's CABLE BOX terminal.

NOTE:

- About Your Cable Box:
  This VCR has two separate methods to control your Cable Box. The provided Wireless Remote Control Unit can control your Cable Box. The VCR's Cable Box Controller can also control your Cable Box. The former eliminates the need for a separate Cable Box Remote Control Unit. The latter is to change your Cable Box's channel number during timer recordings. Each method must be set up separately. To set up the VCR's Remote Control Unit ☞ p. 33.



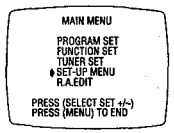
TURN ON THE VCR

5 Press POWER.
- If watching on channel 3 or 4, press TV/VIDEO to select the VIDEO mode. The VCR's VIDEO indicator will light.

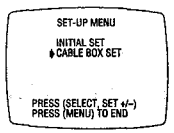
SET TO CABLE BOX'S OUTPUT CHANNEL

6 Press MENU until the Main Menu appears (☞ p.7).

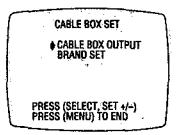
7 Press SET to move the cursor to SET-UP MENU. Then press SELECT.



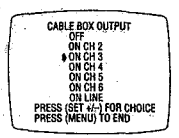
8 Press SET to move the cursor to CABLE BOX SET. Then press SELECT.



9 Press SET to move the cursor to CABLE BOX OUTPUT. Then press SELECT.



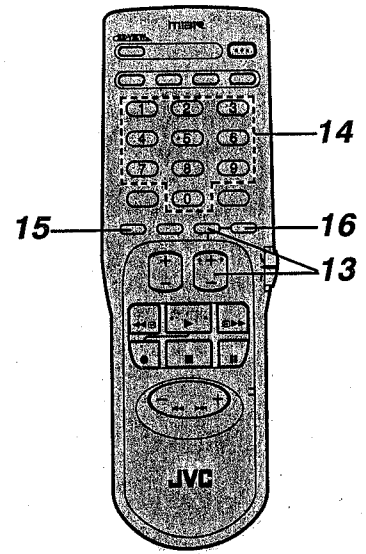
10 Press SET to choose the output channel number of your Cable Box (channels 2 thru 6) if it's connected to your VCR via RF connection.
- For example, choose "ON CH3" if the Cable Box provides its output on channel 3.
- Choose "ON LINE" if the Cable Box is connected to your VCR's Audio/Video input connectors.



11 Press MENU.
- Cable Box Set menu will appear.

(Continued on next page.)

Setting Up Your VCR (cont'd)



SET CABLE BOX BRAND

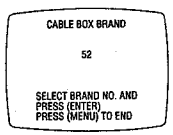
12 Turn on the Cable Box's power.
- Select a channel other than 9 on your Cable Box.

13 Press SET to move the cursor to BRAND SET. Then press SELECT.

14 Press the Digit keys corresponding to the code number for your Cable Box's brand. (See list below.)

15 Press ENTER.
- If Cable Box's channel changes to "9", setting is completed.
- If the brand has more than one code number listed, repeat steps 14 –15 until you reach the code that changes your Cable Box's channel.
- Perhaps your cable box will respond to a new code number not yet published in the list. Try entering all code numbers from 1 to 101.

16 Press MENU as many times as necessary to exit.



- Now go to ☞ p. 17 "Setting up the VCR Plus+ feature".
- To change cable channels or turn on/off your cable box using the VCR's remote control, ☞ p. 33.

CABLE BOX BRAND LIST

BRAND	CODE
ARCHER	52, 53, 54, 85, 86
CABLEVIEW	85, 86
CITIZEN	85, 86
CURTIS	13, 14, 15, 16
DIAMOND	52, 53, 54
EAGLE	30, 31, 32, 33, 34, 35, 36, 37
EASTERN	51
GC BRAND	85, 86
GEMINI	55, 56
GENERAL ELECTRIC	67
GENERAL INSTRUMENTS	1, 2, 3, 4, 5, 6, 101
HAMLIN	23, 24
JERROLD	1, 2, 3, 4, 5, 6, 101
MACOM, HITACHI	57, 58, 59
MAGNAVOX	43, 44, 45, 46, 47, 48, 49
MOVIETIME	71, 72, 73
NSC	71, 72, 73
OAK	17, 18, 19, 20, 21, 22
PANASONIC	25, 26, 27
PHILIPS	38, 39, 40, 41, 42
PIONEER	7, 8
PULSER	85, 86

BRAND	CODE
RCA	25, 26, 27
REGAL	78, 79, 80
REGENCY	51
SAMSUNG	74, 75, 76
SCIENTIFIC ATLANTA	13, 14, 15, 16
SL MARX	74, 75, 76
SPRUCER	25, 26, 27
STARGATE	74, 75, 76, 85, 86
SYLVANIA	70
TEKNIKA	68, 69
TELECAPTION	100
TELEVIEW	74, 75, 76
TEXSCAN	28, 29
TOCOM	62, 63, 64, 65, 66
UNIKA	52, 53, 54, 85, 86
UNIVERSAL	81, 82, 83, 84
VIDEOWAY	9, 10, 11, 12
VID TECH	89
VIDTER	89
VIEWSTAR	30, 31, 32, 33, 34, 35, 36, 37
ZENITH	9, 10, 11, 12

NOTES:
- Although the provided Cable Box Controller is compatible with many different cable box brands, it is possible that it will not work with your cable box.
- If your cable box does not respond to any of the codes, your VCR is not able to change its channels during timer recordings. For this type of cable box, always remember to leave it turned on and tuned to the channel you want to record before the timer recording is programmed to start.
  Please contact your cable company about the possibility of exchanging your current cable box with one that is compatible with the VCR.
- The VCR can change the Cable Box channel selection through the Cable Box Controller only during timer recording.
- If your cable box cannot be controlled by a remote control, your VCR will not be able to change its channels during timer recording. For this type of cable box, turn it on and select the channel you want to record before the timer recording is programmed to start.
- If you are unable to set the cable box controller please contact JVC toll free at 1-800-252-5722.

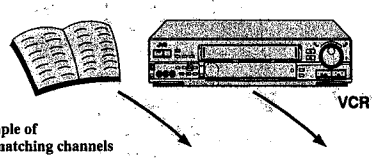
Setting up the VCR Plus+ feature

Depending on the broadcast stations that are receivable in your area, or the cable stations offered by your cable supplier, you may have to make certain changes in your VCR's "Guide Channel Set" menu to get proper results. Please read on and find out what you need (and don't need) to do.

Make sure that you have already...

set the VCR's clock
set the VCR's tuner.
set the Cable Box Controller (☞ p. 14) if using a Cable Box.

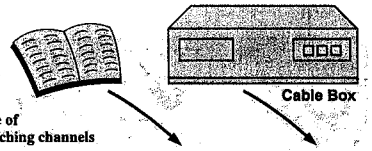
(If NOT using Cable Box)



Example of non-matching channels

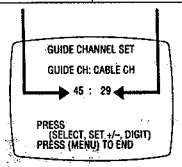
Broadcast Station	VCR Plus+ Assigned Guide Channel	The channel your VCR receives the station on
WNYB (TBN)	67	49
WSBK Boston, MA	15	38
WXTV Paterson, NJ	12	41
WNJU (Ind.)	6	47
WEDW Bridgeport, CT	14	49
WLIG Riverhead	10	55
WFXV (FOX)	33	28

(If using Cable Box)



Example of non-matching channels

Cable Station	VCR Plus+ Assigned Guide Channel	The channel your Cable Box receives the station on
WNJU (Ind.)	6	8
WLIW (PBS)	21	34
Music Television	48	20
Cable News Network	42	27
Home Box Office	33	28
Cinemax	45	29



Then...

COMPARE CHANNEL NUMBERS

Most TV listings will have a chart indicating the "Guide Channel" number that each TV station has been assigned for purposes of VCR Plus+ programming. Check in your TV listing and see whether that number is the same as the channel number you receive that station on with your VCR or Cable Box.*

If the numbers match, you don't have to do anything. You can go directly to "Timer-Recording with VCR Plus+" p. 28.

If there are stations where the numbers are different, and you want to be able to timer-record them, you will have to "tell" the VCR about the mismatch. Go to step 1.

If there are stations where the numbers are different, but you don't want to timer-record them, you can go directly to "Timer-Recording with VCR Plus+" p. 28.

*SPECIAL NOTE FOR CABLE SUBSCRIBERS

- In many instances, cable TV stations have VCR Plus+ Guide Channel numbers that DO NOT match the actual channel number the station is received on. Check your TV listing, or check with your cable supplier for details.
- In many instances, normal broadcast TV stations can be viewed on cable. Check your TV listing, or check with your cable supplier for details.

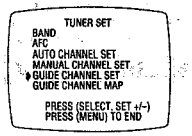
TURN ON THE VCR

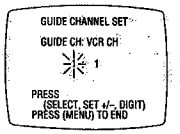
1 If the VCR is off, press POWER to turn it on.
- If watching on channel 3 or 4, press TV/VIDEO to select the video mode. The VCR's VIDEO indicator will light.

ACCESS THE ON-SCREEN MENU

2 Press MENU, SET and SELECT as many times as necessary to access the "TUNER SET" screen. (☞ p.7)

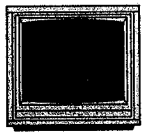
3 Press SET to move the cursor to "GUIDE CHANNEL SET", and then press SELECT.
- The Guide Channel Set screen will appear.
- If you have set the Cable Box Controller feature CABLE CH is displayed instead of VCR CH.



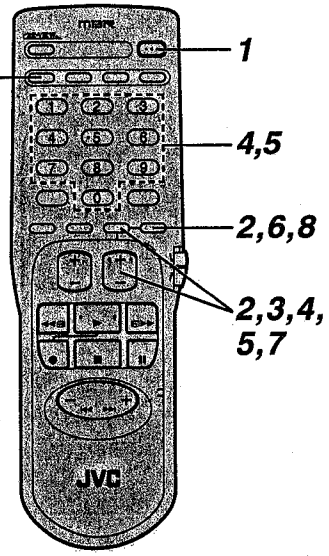


(Continued on next page.)

Setting Up Your VCR (cont'd)

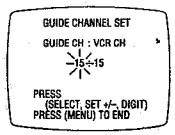


POWER ON;
SELECT CHANNEL
3 OR 4 (OR AV MODE)



INPUT THE GUIDE CHANNEL

4 Press SET or the Digit keys to input the Guide Channel number (as shown in TV listing or this manual), and then press SELECT.

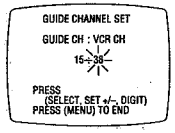


INPUT THE RECEIVING CHANNEL

If you don't use an external Cable Box . . .

5 Press SET or the Digit keys to input the channel number your VCR receives the station on, and then press SELECT.

- If there are other GUIDE CH numbers which don't match with the VCR CH numbers, input the changes by repeating steps 4 – 5.



If you use an external Cable Box . . .

5 Press SET or the Digit keys to input the channel number your Cable Box receives the station on, and then press SELECT.

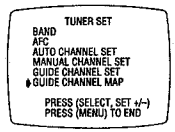
- If there are other GUIDE CH numbers which don't match with the CABLE CH numbers, input the changes by repeating steps 4 – 5.

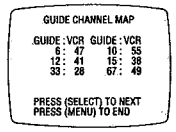
CHECK THE GUIDE CHANNEL MAP

6 Press MENU once to go back to the Tuner Set menu.

7 Press SET to move the cursor to "GUIDE CHANNEL MAP", and then press SELECT.

- A screen with GUIDE CH numbers (in ascending order) with their corresponding VCR CH numbers will be displayed. Check to make sure your entries are correct.
- If there are more than 10 entries, press SELECT to display the 11th and higher entries.





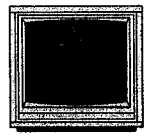
RETURN TO THE TV SCREEN

8 Press MENU as many times as necessary to exit.

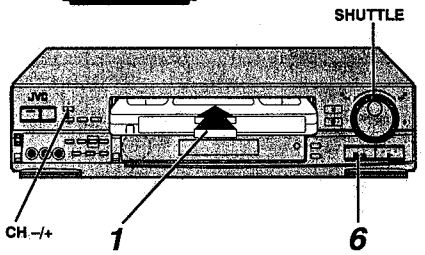
Playback

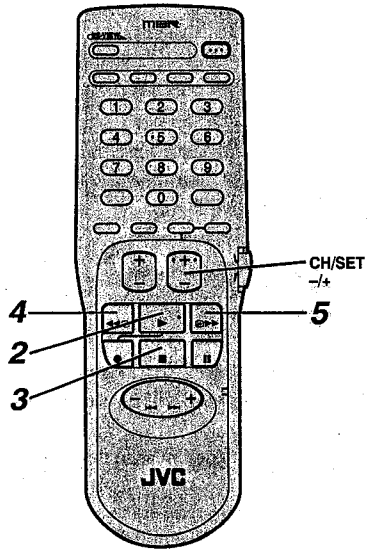
POR INSTRUCCIONES EN ESPAÑOL VEA p. 42 – 43.

The easiest, most basic operation possible with your VCR is tape playback. Previously-recorded signals on a video tape are read by your VCR and displayed on your TV just like a TV program.



POWER ON;
SELECT CHANNEL
3 OR 4 (OR AV MODE)





LOAD A CASSETTE

1 Insert a cassette with its window side up, and label side facing you. Press gradually on the middle of the cassette until the VCR pulls the cassette in.

- The VCR power will come on automatically.
- The counter will be reset to "0H 00M 00S" automatically.
- If the safety tab on the cassette is absent, playback will start automatically.

TO START PLAYBACK

2 Press PLAY.

TO STOP PLAYBACK

3 Press STOP.

TO REWIND OR FAST-FORWARD

4 Press REW to rewind the tape.

5 Press FF to fast-forward the tape.

- Press STOP to stop the tape.
- To rewind or fast-forward the tape using the VCR's control, turn the SHUTTLE ring fully to the corresponding direction, and release it.

TO EJECT THE TAPE

6 Press the VCR's STOP/EJECT button again.

To adjust tracking manually

This overrides your VCR's automatic tracking.

During Playback...

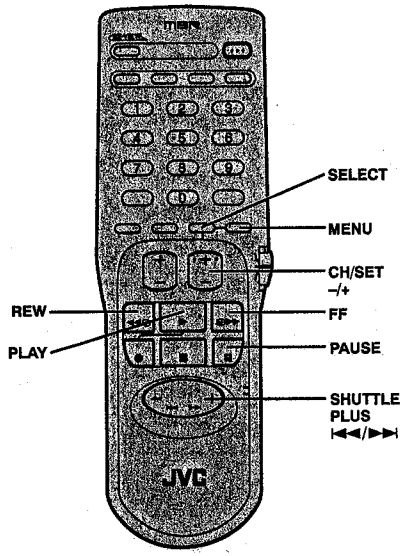
1 Press the VCR's CH(annel) +/– buttons simultaneously to cancel auto tracking.
- The remote control's CH +/– cannot be used for this purpose.

2 Press CH + or – to adjust tracking.
- Press the VCR's CH +/– simultaneously to return to automatic tracking.

During Slow...

1 Simply press CH + or – to adjust tracking.

Playback (cont'd)



To view a still picture

During Playback...

1. Press PAUSE to view a still picture.
   - If there is vertical picture jitter, press CH – or + (on the VCR or remote control) to make the picture more stable.
2. To advance the picture frame by frame, press PAUSE again.
   - For frame-by-frame playback in the forward or reverse direction, press SHUTTLE PLUS I◄◄ or ►►I in the corresponding direction while in the still picture mode.
3. Press PLAY to resume normal playback.

To view a slow/fast-motion picture

During Playback...

1. Press the SHUTTLE PLUS I◄◄ or ►►I button. Tape speed will change in the corresponding direction.
   - To increase the speed, press the button for the same direction.
   - To decrease speed, press the button for the opposite direction.
   - For forward slow motion playback, press PAUSE for more than 2 seconds while in the still picture mode.
2. Press PLAY to resume normal playback.

Or...

During Playback...

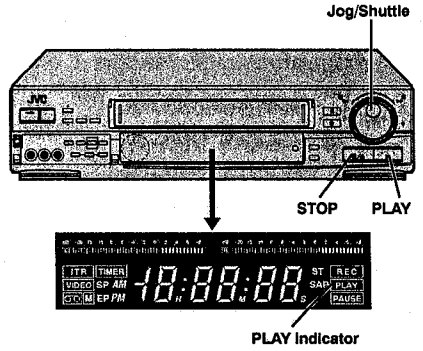
1. Press FF for forward fast-motion, or REW for reverse fast-motion.
2. Press PLAY to resume normal playback.
   - For short searches, keep FF or REW pressed for more than 2 seconds. When released, normal playback will continue.

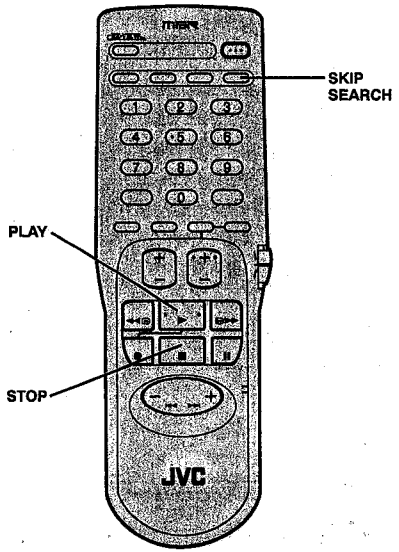
To select the soundtrack

Your VCR is capable of recording two soundtracks (Hi-Fi and NORMAL) simultaneously, and playing back the selected soundtrack or two together.

During Playback or Stop:

1. Press MENU, SET, and SELECT as many times as necessary to access the AUDIO MONITOR screen. (☞ p. 7).
2. Press SET to choose "HI-FI", "NORM", or "MIX".
   - HI-FI to listen to the Hi-Fi soundtrack.
   - NORM to listen to the normal soundtrack.
   - MIX to listen to both soundtracks combined. Select this setting when playing back edited tapes with insert edits or dubbed audio made on an appropriately equipped VCR.
   - Normal audio will be outputted regardless of the playback audio monitor selection if Hi-Fi audio is not present on the tape.
3. Press MENU as many times as necessary to exit.



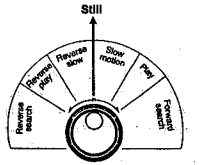


To view jog/shuttle special effects

You can view pictures in slow to fast motion, or frame-by-frame.

During Still or Playback...

1. Turn the outer ring (Shuttle) to the right for forward slow motion and search.
   - Release the Shuttle for a still picture.
   - For fast-forward with a visible picture, turn the Shuttle all the way to the right and release it within 1 second.
2. Turn the outer ring (Shuttle) to the left for reverse slow motion and search.
   - Release the Shuttle for a still picture.
   - For rewind with a visible picture, turn the Shuttle all the way to the left and release it within 1 second.



During Still or Playback...

1. Rotate the inner dial (Jog) clockwise or counterclockwise for jog control. The tape moves frame-by-frame at the speed with which the dial is rotated, in the direction the dial is rotated. (By rotating the Jog dial counterclockwise at 2 revolutions per second or faster, reverse play is possible.)

To resume normal playback, press the PLAY button.

Skip Search

To skip over unwanted sections of a recording.

During Playback...

1. Press SKIP SEARCH from 1 to 4 times.
   This fast-motions through 30-sec. to 2-min. of tape.
   - Playback resumes automatically.
   - Press PLAY to cancel a Skip Search midway.

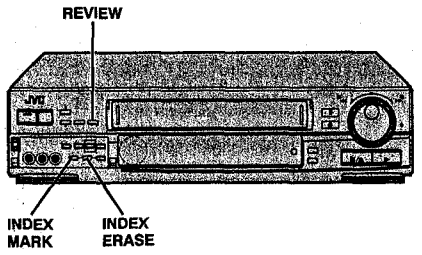
Repeat Playback

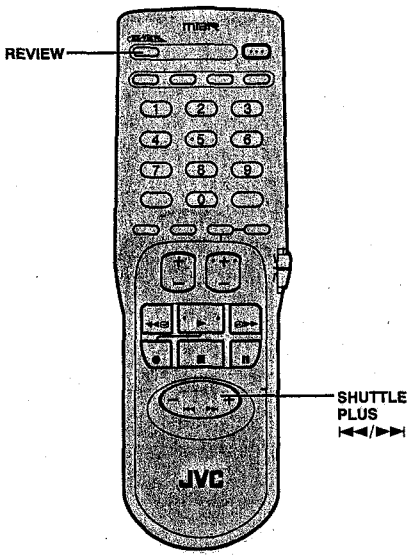
To play the whole tape repeatedly.

During Playback...

1. Press PLAY for more than 5 seconds, and release.
   - The "PLAY" indicator on the VCR panel will blink slowly.
   - The tape will be played 20 times automatically, and then stop.
   - To stop repeated playback at any time, press STOP.

Playback (cont'd)





Instant ReView

Simply by pressing a single button, the VCR power comes on, rewinds, and begins playback of the last recording. This makes it easier to "review" the program you have timer-recorded.

When the VCR power is off:

1 Press REVIEW.
- After the VCR power comes on, the tape will be rewound to the beginning of the last recording (where the index code is placed) and playback will start automatically.
- To play back a recording located 2 index codes away, press REVIEW twice. You can access any one of up to 9 index codes.
- ReView is not possible while the VCR is in the Timer mode.
- The VCR's REVIEW button lights when timer-recording is finished, and blinks while the tape is being rewound.

Index Search

Index codes are electronic "bookmarks" which are automatically placed on the tape whenever recording is started. Index Search automatically seeks out these index codes so you can easily find the beginning of a recording (up to 9 index codes away in either direction).

During Stop....

1 Press SHUTTLE PLUS I◄◄ or ►►I. "INDEX –1" or "INDEX 1" will be displayed and search will begin in the corresponding direction.

2 If you wish to access index codes 2 through 9, press SHUTTLE PLUS I◄◄ or ►►I repeatedly until the correct index number is displayed.
- When the specified index code is found, playback will start automatically.

Manual Index Mark/Erase

TO MARK AN INDEX CODE

During Playback...

1 Press INDEX MARK.
- The VCR will mark an index code at that location.
- "MARK" blinks while an index code is being marked.

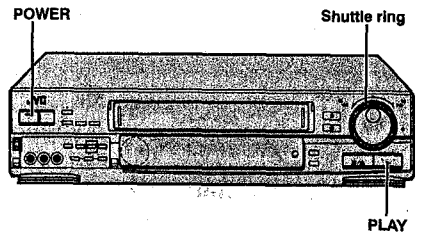
TO ERASE AN INDEX CODE

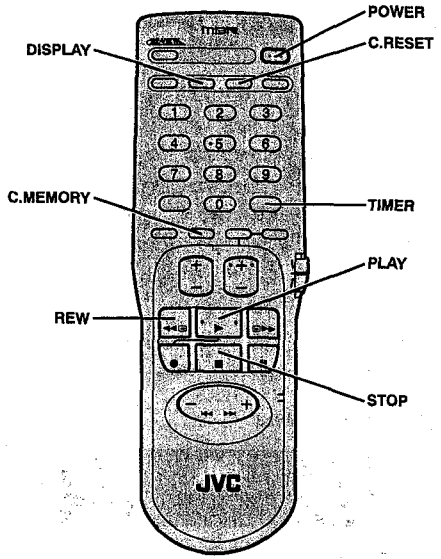
During Playback or Still...

1 Press INDEX ERASE.
- The VCR will fast-forward to the nearest index code and erase it. Playback continues after the index code is erased.
- "ERASE" blinks while an index code is being erased.

NOTES:

- If adjacent index codes are too close to each other, Index Search may not function properly.
- If the cassette's safety tab has been removed, index codes cannot be marked or erased.
- An index code is not placed on the tape when recording is paused and then resumed.





Counter Reset

To reset the tape counter to zero.

1 Press C. RESET.
- Pressing DISPLAY repeatedly changes the VCR's displayed indication. (Counter reading → Channel* → Clock time → Remain).

*Channel is not displayed during playback.

Counter Memory

To return to tape position zero,

During Playback...

1 Press C. RESET at a point you wish to locate later.
- The counter will read "0H 00M 00s".

2 Press C. MEMORY.
- Counter Memory mark is displayed.

3 When you wish to return to that point, press STOP and then press REW.
- The tape will rewind and stop at about "0H 00M 00s" automatically.

4 To cancel the Counter Memory mode, press C. MEMORY.

Next-Function Memory

You can "tell" the VCR what to do immediately after rewinding.

During Stop:

For automatic start of playback after the tape is rewound...

1 Press REW.
2 Press PLAY within 2 seconds.

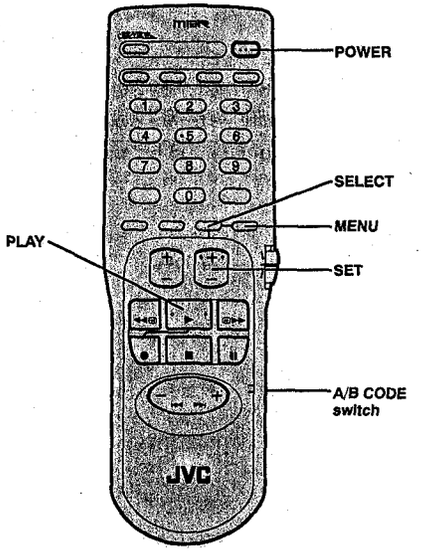
For automatic power off after the tape is rewound...

1 Press REW.
2 Press POWER within 2 seconds.

For automatic timer standby after the tape is rewound...

1 Press REW.
2 Press TIMER within 2 seconds.
- **To do the above using the VCR's controls:** During Stop, turn the Shuttle all the way to the left and release it instead of pressing REW, and then press PLAY or POWER within 2 seconds.
- If you want the "next function" to automatically start when the counter reads "0H 00M 00s" (instead of at the beginning of the tape), press C. MEMORY so that the counter memory "M" mark appears on the VCR display panel before pressing REW or FF.

Playback (cont'd)

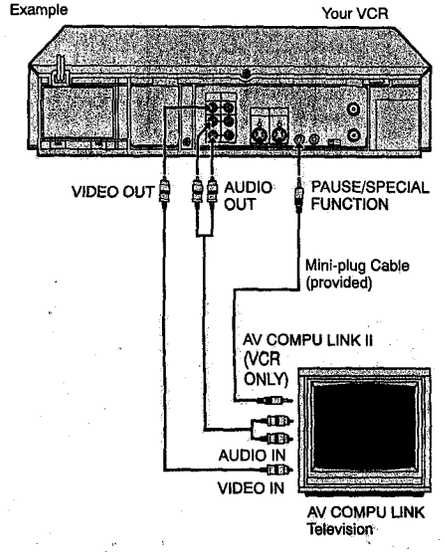


To control two JVC VCRs

The remote control is capable of controlling two JVC VCRs independently using the A/B CODE switch . You can set this VCR so that it responds to the remote control only when the switch is in the "B" position and set another JVC VCR so that it responds only when the switch is in the "A" position. This way you can control two JVC VCRs independently with a single remote control.

The A/B CODE switch is preset to the "A" position because your VCR is initially set to respond to A code signals. You can easily modify your VCR to respond to B code signals.

1. Unplug the VCR's power cord from the AC outlet.
2. Set the A/B CODE switch on the remote control unit to "B".
3. Plug the VCR's power cord back into the AC outlet. Do not use other remote controls at this stage.
4. Turn the VCR power on using the remote control's POWER button. The VCR will now respond only to B code signals.

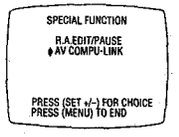


AV COMPU LINK Playback

Your VCR is compatible with JVC's AV COMPU LINK components which include amplifiers (or receivers) and televisions.

PREPARATION

1. Connect your VCR to an AV COMPU LINK amplifier and/or an AV COMPU LINK television as illustrated.
2. Press MENU, SET, and SELECT as many times as necessary to access the SPECIAL FUNCTION screen. (☞ p. 7)
3. Press SET to choose "AV COMPU-LINK".
4. Press MENU as many times as necessary to exit.



OPERATION

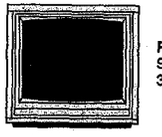
AV COMPU LINK video playback is as easy as this:

- Simply load a cassette in your VCR and press PLAY. (If the cassette's safety tab has been removed, it is not necessary to press play.) The TV (and amplifier) turn on automatically and the TV's mode is automatically set to VIDEO; you're ready to watch!
- Connection varies according to the type of TV. Please read your TV's instruction manual when making TV connection.

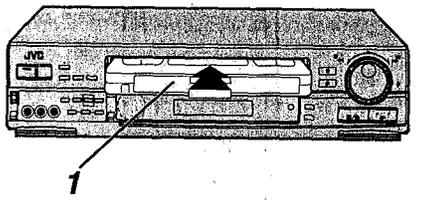
Recording

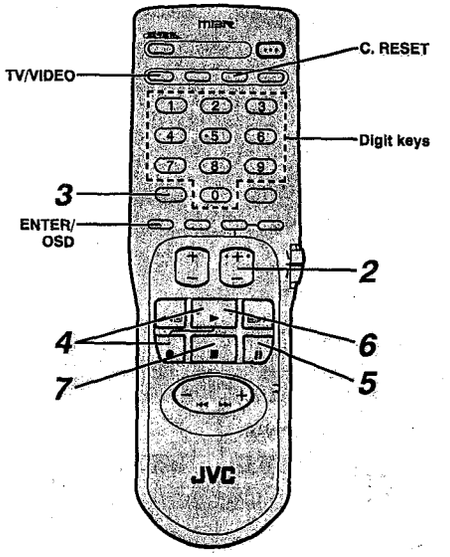
POR INSTRUCCIONES EN ESPAÑOL VEA p. 42 – 43.

TV signals being received by the VCR's built-in tuner can be recorded onto a video tape. This is realtime video recording.



POWER ON;
SELECT CHANNEL 3 OR 4 (OR AV MODE)





LOAD A CASSETTE

1. Insert a cassette with the safety tab present.
   - The VCR power will come on automatically.
   - If watching on channel 3 or 4 be sure that the VIDEO indicator is lit. If the indicator is not lit, press TV/VIDEO so that it lights.

CHOOSE A PROGRAM

2. Press CH(annel) +/– (or the digit keys followed by ENTER) to select the channel you wish to record.
   - Even if you don't press ENTER, the channel will automatically change in about 2 seconds.

SET THE TAPE SPEED

3. Press SP/EP.

TO START RECORDING

4. Press REC and PLAY simultaneously.

TO PAUSE RECORDING

5. Press PAUSE.
6. Press PLAY to resume recording.

TO STOP RECORDING

7. Press STOP.

To watch a program while recording another

During Recording...

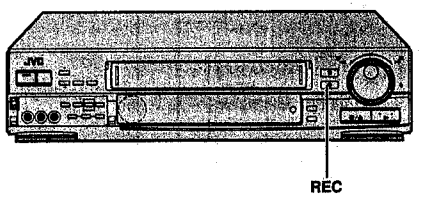
1. Press TV/VIDEO. The VCR's VIDEO indicator and the TV broadcast being recorded will disappear.
2. Use the channel controls on the TV to select the other channel you wish to view.
   - The program selected with the TV channel controls will appear on the TV screen while the one selected with the VCR channel controls will be recorded on the tape.

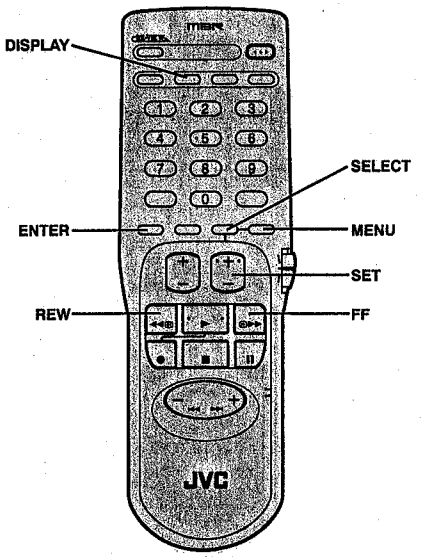
To display the elapsed recording time

Before starting recording...

1. Press C. RESET.
   - The counter will be reset to "0H 00M 00S", and will show the exact elapsed time as the tape runs.
2. After starting recording, press OSD at any time to check the elapsed time on the TV screen.
3. Press OSD again to clear it from the screen.

Recording (cont'd)



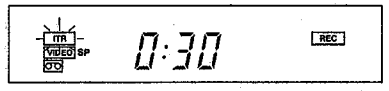


Instant Timer Recording

To set the VCR to shut-off automatically after recording.

During Recording...

1 Press the VCR's REC button. The "ITR" indication blinks and "0:30" appears indicating the recording will continue for 30 minutes and then power will switch off.



2 Press REC again to extend the record time by 30-minute increments (up to 9 hours).
- This function is available only using the REC button on the VCR.
- After the off-time is set, the display returns to the previously displayed mode (counter, channel, clock or remain).
- You can check the time remaining before the VCR shuts off by pressing REC once; the remaining time is displayed for 5 seconds. (Pressing REC more than once will extend the record time.)

To display the remaining tape time

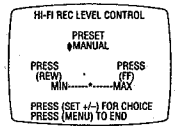
1 Press ENTER. Counter information appears on the screen.
2 Press DISPLAY until "REMAIN" appears. Approximate remaining tape time appears on the TV screen and VCR display panel.
- If recording is in progress, the remaining time display on the VCR changes back to the "REC" mode display after 5 seconds.
- Pressing DISPLAY repeatedly changes the displayed indication (Counter → Channel → Clock time → Remain).

3 Press ENTER again to clear it from the screen.

Hi-Fi Audio Recording Level Control

Your VCR allows manual adjustment of the Hi-Fi audio recording level. Although the preset audio recording level is satisfactory for normal recording, if the sound you are going to record is too loud or too low, adjust the audio recording level while referring to the VCR's audio level meters.

1 Press MENU, SET, and SELECT as many times as necessary to access the HI-FI REC LEVEL CONTROL screen. (☞ p.7)



2 Press SET to choose "MANUAL".
3 Press FF or REW to adjust the audio recording level.
- To move the on-screen's audio levels by one division of the scale, press FF or REW briefly for 5 times in succession. To move the audio levels faster, keep FF or REW presssed.
- Adjust the recording level so that the audio level meters reach from 0dB to 4dB at the maximum sound volume.

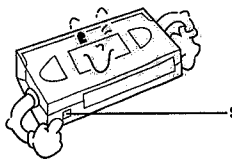
4 Press MENU as many times as necessary to exit.

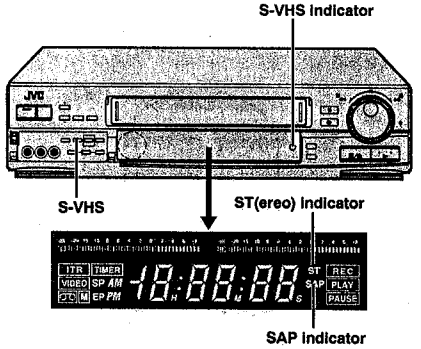
NOTE:
- Noise will increase if the recording level is too low, while distortion will increase if the level is too high.

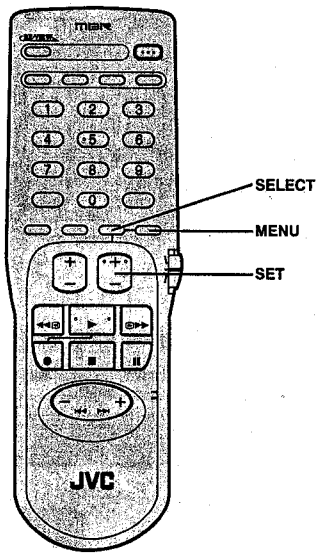
Accidental erasure prevention

- To prevent accidental recording on a recorded cassette, remove its safety tab.

To record on it later, cover the hole with adhesive tape.







S-VHS (Super VHS) and VHS

Your VCR can record in either S-VHS or VHS.
- To record in S-VHS, insert a cassette marked "S-VHS". The S-VHS indicator will light and the S-VHS recording mode is automatically selected.
- To record in VHS, insert a cassette marked "VHS". The VHS recording mode is automatically selected.
- You can also record in VHS on S-VHS cassettes. To do this, after inserting an S-VHS cassette, press the S-VHS button. The S-VHS indicator will go out.

Stereo and SAP (Second Audio Program)

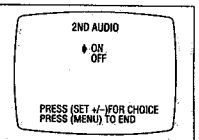
Your VCR is equipped with an MTS decoder for reception of Multichannel TV Sound broadcasts.
- When a stereo program is being received, the ST indicator lights.
- When an SAP program (such as a bilingual broadcast) is being received, the SAP indicator lights.
- When a stereo program is accompanied by SAP audio, both indicators light.

To record stereo programs

Stereo programs are automatically recorded in stereo on the Hi-Fi audio track. No special operation is required. Simply follow the basic recording procedure.
- To listen to the stereo soundtrack while recording, set the on-screen AUDIO MONITOR to "HI-FI". ☞ p. 20.

To record SAP programs

1 Press MENU, SET, and SELECT as many times as necessary to access the 2ND AUDIO screen. (☞ p. 7).



2 Press SET to choose "ON".
3 Press MENU as many times as necessary to exit.

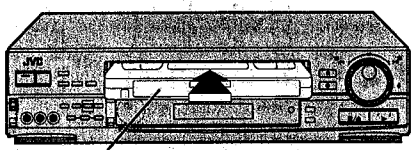
Then follow the basic recording procedure.
- If an SAP program is received, the SAP audio will be recorded on both the Hi-Fi and the normal audio tracks. The main audio program will not be recorded.
- If a regular program (non-SAP) is received, the main audio will be recorded on both the Hi-Fi and the normal audio tracks.

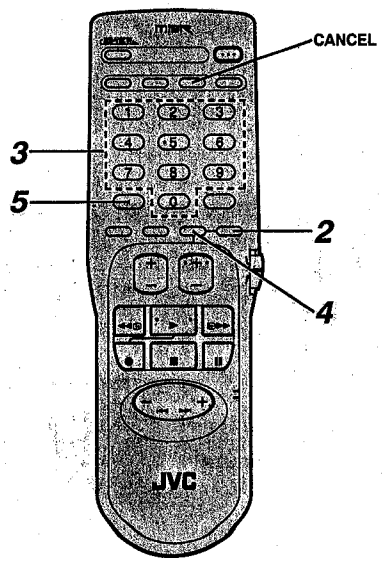
Timer-Recording with VCR Plus+

Your video recorder is equipped with the VCR Plus+ programming system. This programming system greatly simplifies timer programming because you won't have to enter all the data that is usually necessary (such as date, start and stop time, and channel). Simply key-in the PlusCode number for the TV program you wish to record (in most TV listings) and the VCR's timer is programmed. (For On-Screen Timer Programming without VCR Plus+ ☞ p.30.)

VCR Plus+ programming is not possible unless you have already....

set the VCR's clock
set the VCR's tuner
made necessary changes in the Guide Channel Set screen.





LOAD A CASSETTE

1 Insert a cassette with the safety tab present.
- The VCR power will come on automatically.
- If watching on channel 3 or 4 be sure that the VIDEO indicator is lit. If the indicator is not lit press TV/VIDEO so that it lights.

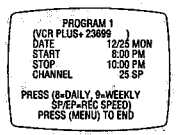
INPUT THE TV PROGRAM'S CODE NUMBER

2 Press MENU.
- The "VCR PLUS+" input screen will be displayed.

3 Press the Digit keys to enter the PlusCode number for the TV program you wish to record.
- To make corrections, press CANCEL and re-input with Digit keys.

CHECK FOR CORRECTNESS

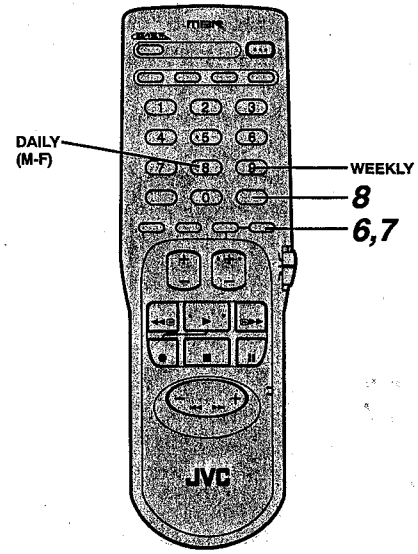
4 Press SELECT.
- The settings for the PlusCode number you just entered will be displayed.
- If the settings are incorrect and do not match the program you wish to record, press CANCEL and, after pressing MENU three times, re-input the PlusCode.



SELECT THE TAPE SPEED

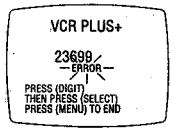
5 Press SP/EP.

(Continued on next page.)



"ERROR" WARNING

If the PlusCode you input is incorrect, "ERROR" may appear on the screen to advise you of the error. This happens when the code is for a program which has already passed. "ERROR" is displayed for about 4 seconds and returns to the input screen (step 2).



RETURN TO THE TV SCREEN

6 Press MENU.
- Select the desired Auto Timer setting. See page 32 for details.

7 Press MENU again.

SET TO TIMER MODE

8 Press TIMER.
- The VCR will enter the timer mode and power will go off.

For AUTO TIMER and other timer programming features, ☞ p. 32.
For other error indications, ☞ p. 39.

To Timer-Record Daily Serials

This function lets you set the recorder to timer-record at the same time every day, Monday through Friday.
- After pressing SELECT in step 4, press DAILY (Digit key 8). "DAILY" will appear.

To Timer-Record Weekly Serials

This function lets you set the recorder to timer-record at the same time on the same day every week.
- After pressing SELECT in step 4, press WEEKLY (Digit key 9). "WEEKLY" will appear.

TO MAKE CHANGES IN THE SETTINGS

You can delay a program's stop time or make other such "revisions" in the settings.

1. After step 5, press SELECT.
2. Press SELECT to move to the setting you wish to change, so that it blinks.
3. Press SET to make the change.
4. Return to step 6.

TO DISENGAGE THE TIMER

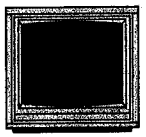
For safety, when AUTO TIMER is "OFF", your VCR disables all other functions while in the timer mode.
- To use your VCR, first disengage the timer mode by pressing TIMER again. Now all functions will be operable.
- To re-engage the timer, press TIMER.

NOTE:
If there is a power failure the VCR will remember your timer-record selections for 60 minutes.

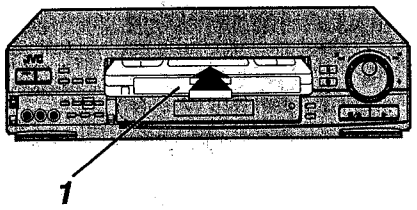
Timer-Recording without VCR Plus+

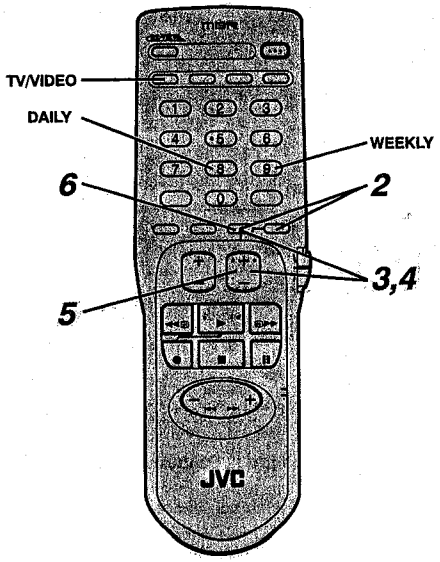
POR INSTRUCCIONES EN ESPAÑOL VEA p. 42 – 43.

With the On-Screen Timer Programming function introduced here you can directly program the VCR's timer to record up to 8 TV shows, up to a year ahead. It's especially convenient when you want to timer-record programs while you're away from home for long periods of time (over a week), or for TV programs listed without a PlusCode. TIMER PROGRAMMING IS NOT POSSIBLE UNLESS THE CLOCK HAS BEEN SET.



POWER ON;
SELECT CHANNEL
3 OR 4 (OR AV MODE)





You can also use the MENU, SET and SELECT buttons on the VCR.

LOAD A CASSETTE

1 Insert a cassette with the safety tab present.
- The VCR power will come on automatically. If watching on channel 3 or 4 be sure that the VIDEO indicator is lit. If the indicator is not lit, press TV/VIDEO so that it lights.
- If the clock has not been set, set the clock before starting step 2. ☞ p. 11

ACCESS THE ON-SCREEN MENU

2 Press MENU twice and then press SELECT.
- The Program Set screen will appear.

SELECT A PROGRAM NUMBER

3 Press SET to move to a vacant program number, and then press SELECT.
- Initially all programs are vacant, and the cursor is at program 1. So simply press SELECT.

PROGRAM 1
DATE –/–
START –:– AM
STOP –:– AM
CHANNEL – SP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

INPUT THE DATE

4 Press SET to set the month, and then press SELECT.

5 Press SET to set the day.
- The day of the week will automatically appear.
- To record the program daily (Mon-Fri) press DAILY (Digit key 8). To record the program weekly press WEEKLY (Digit key 9). "DAILY" or "WEEKLY" will appear on the screen.

6 Press SELECT.

PROGRAM 1
DATE 12/28 THU
START –:– AM
STOP –:– AM
CHANNEL – SP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

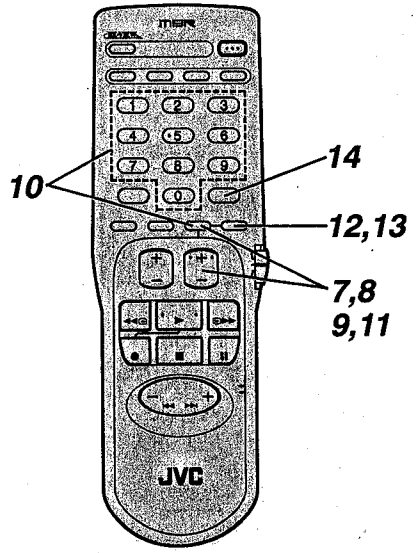
(Continued on next page.)

"ERROR" WARNING

If the start time you input has already passed (i.e. is prior to the present date and time), the VCR will flash "ERROR" on the Program Set screen.

PROGRAM 1
– ERROR –
DATE 3/22 WED
START 12:30 AM
STOP –:– AM
CHANNEL – SP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

Check if you've input the correct time and date. Remember: late night shows beginning at midnight or later must have the next day's date.



TO DISENGAGE THE TIMER

For safety, when AUTO TIMER is "OFF", your VCR disables all other functions while in the timer mode.
- To use your VCR, first disengage the timer mode by pressing TIMER again. Now all functions will be operable.
- To re-engage the timer, press TIMER.

INPUT THE START TIME

7 Press SET to set the hour (making sure that AM or PM is correct), and then press SELECT.

8 Press SET to set the minutes, and then press SELECT.

PROGRAM 1
DATE 12/28 THU
START 12:00 PM
STOP –:– AM
CHANNEL – SP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

INPUT THE STOP TIME

9 Set the stop time in the same way as you set the start time in steps 7 – 8.

PROGRAM 1
DATE 12/28 THU
START 12:00 PM
STOP 1:00 PM
CHANNEL – SP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

INPUT THE CHANNEL NUMBER

10 Press the Digit keys to enter the channel number, and then press SELECT.

PROGRAM 1
DATE 12/28 THU
START 12:00 PM
STOP 1:00 PM
CHANNEL 25 SP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

SET THE TAPE SPEED

11 Press SET to choose SP or EP, and then press SELECT.
- To input another program, repeat steps 3 – 11. (You can set up to a maximum of 8 programs.)

PROGRAM 1
DATE 12/28 THU
START 12:00 PM
STOP 1:00 PM
CHANNEL 25 EP
PRESS (SELECT, SET +/–)
PRESS (MENU) TO END

RETURN TO THE TV SCREEN

12 Press MENU.
- Select the desired Auto Timer setting. See page 32 for details.

13 Press MENU again.

SET TO TIMER MODE

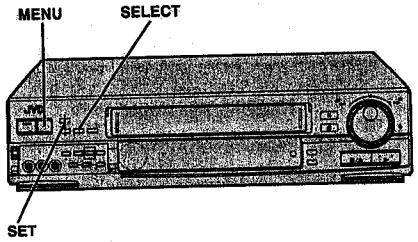
14 Press TIMER.
- The VCR will enter the timer mode and power will go off.

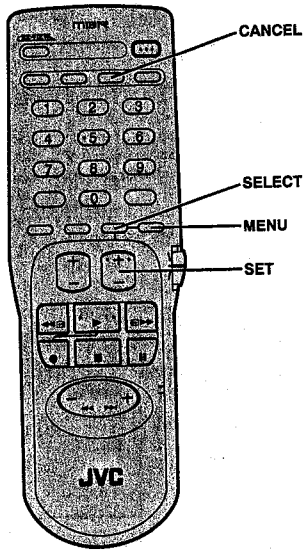
For AUTO TIMER and other timer programming features, ☞ p. 32.
For other error indications, ☞ p. 39.

NOTES:

- If there is a power failure, the VCR will remember your timer-record selections for 60 minutes.
- When timer-recording cable channels received through a Converter Box, be sure to keep the Converter Box set to ON.

Timer-Recording (cont'd)

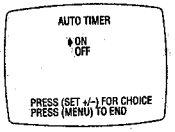




Auto Timer

What this feature does: Usually, the timer mode is not engaged unless the TIMER button is pressed. But with AUTO TIMER set to ON, the timer mode is automatically engaged when the VCR's power is turned off, and is disengaged whenever VCR power is turned on again.

1 After step 6 (☞ p. 29) or step 12 (☞ p. 31), press SET to choose "ON", and press MENU.



Or...

1 Press MENU, SET, and SELECT as many times as necessary to access the AUTO TIMER screen. (☞ p. 7)
2 Press SET to choose "ON".
3 Press MENU as many times as necessary to exit.

To check and cancel programs

Make sure the timer mode is disengaged first. Then...

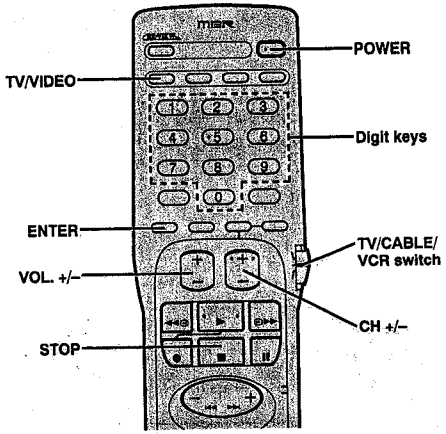
1 Press MENU and then press SELECT (to access the Program Set screen).
2 Press SET to check through the programs in succession.

To cancel the program...

3 Press CANCEL.
■ Repeat steps 2 and 3 as necessary.
4 Press MENU as many times as necessary to exit.

Special Features

The provided remote control is capable of controlling 10 different TV brands including JVC and 13 different Cable Box brands. Follow the instructions below to set the appropriate code for your TV or Cable Box.



TV Brand Name And Code

TV BRAND NAME	BRAND CODE
JVC	01
MAGNAVOX	02
MITSUBISHI	03
PANASONIC	04
RCA	05
SHARP	06
SONY	07
TOSHIBA	08
ZENITH	09
HITACHI	10

Cable Box Brand Name And Code

CABLE BOX BRAND NAME	BRAND CODE
GI	01,02,03,04,05,06,07,08
JERROLD	01,02,03,04,05,06,07,08
SCIENTIFIC ATLANTA	09,10
ZENITH	11,12
PIONEER	13,14
HAMLIN	15,16,17,18
REGAL	15,16,17,18
OAK	19,20,21
SIGMA	19,20,21
TOCOM	22,23
RCA	24,25,26
PANASONIC	24,25,26
SPRUCER	24,25,26

TV Multi-Brand Remote Control

If your TV is a JVC, you don't have to set the TV code.

PREPARATION

1 Turn the TV's power OFF using the TV's remote control.
2 Set the remote control's TV/CABLE/VCR switch to "TV".
3 While holding down the POWER button, enter your TV's brand code with the Digit Keys then press STOP.
■ Brand setting is completed. Once you set the brand, you do not have to reset it until the remote's batteries are replaced.
■ If you set the wrong code, re-enter the right code.
4 Press POWER to turn the TV power on and check to see if the remote control works with the TV.

OPERATION

1 Set the remote control's TV/CABLE/VCR switch to "TV".
2 Operate the TV.
■ POWER, TV/VIDEO, CH +/-, VOL. +/- buttons and Digit keys are available.
3 To operate VCR, set the TV/CABLE/VCR switch to "VCR".

Cable Box Multi-Brand Remote Control

Some Cable Box brands have more than one code. When your Cable Box does not function with a specified code, try other codes.

PREPARATION

1 Turn the Cable Box power OFF using the Cable Box's remote control.
2 Set the remote control's TV/CABLE/VCR switch to "CABLE".
3 While holding down the POWER button, enter your Cable Box's brand code with the Digit Keys then press STOP.
■ Brand setting is completed. Once you set the brand, you do not have to reset it until the remote's batteries are replaced.
■ If you set the wrong code, re-enter the right code.
4 Press POWER to turn the Cable Box's power on and check to see if the remote control works with the Cable Box.

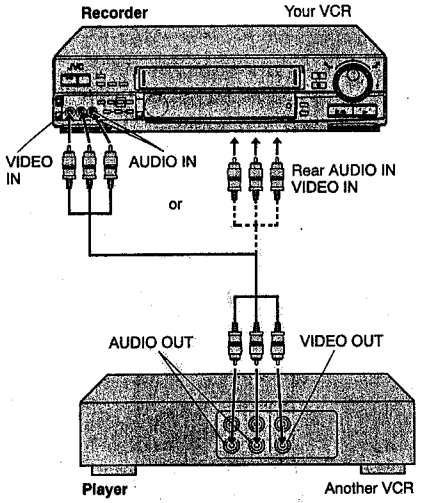
OPERATION

1 Set the remote control's TV/CABLE/VCR switch to "CABLE".
2 Operate the Cable Box.
■ POWER, CH +/-, ENTER buttons and Digit keys are available.
3 To operate VCR, set the TV/CABLE/VCR switch to "VCR".

NOTES:

■ It is necessary to set the cable box brand in your remote control (this page) and the Cable Box Controller (☞p. 16) individually.
With the remote control, you can change channels and turn on/off your cable box from a distance.
With the Cable Box Controller, your cable box's channels can be automatically changed during timer-recording.
■ Cable box brands available for the remote control (listed on the left) differ from those that are available for the Cable Box Controller (☞p. 16).
■ It is possible that the remote control will not operate your cable box even if the cable box's channels automatically change during timer-recording using the Cable Box Controller.

Editing



FOR ASSEMBLE EDITING

Assemble editing adds one recorded scene to another in succession. To use your VCR as the recording deck...

6 Load the source tape in the player, and the recording tape in your VCR.
7 Select the recording speed (SP or EP).
8 Put your VCR in the Record-Pause mode.
9 Play back the source tape to search for a scene to be edited.
10 Press the recorder's PLAY button where you want to start editing.
11 Press the recorder's PAUSE button to stop editing.
12 Repeat steps 9 through 11 to continue editing.
(Assemble Editing is also possible using your VCR as the playback deck.)

Advantages Of S-VHS VCRs

You can edit from VHS to S-VHS, from S-VHS to VHS, or from S-VHS to S-VHS.

- From VHS to S-VHS (VIDEO-VIDEO connection): Record VHS playback signals in the S-VHS mode. Although the picture quality is inherently limited by that of the original, the edited tape has better picture quality than those made by VHS-to-VHS editing.
- From S-VHS to VHS (VIDEO-VIDEO connection): Because the picture quality of the source material is very high, the edited tape has better picture quality than those made by VHS-to-VHS editing.
- From S-VHS to S-VHS (S-VIDEO connection): All signals will be transferred without degradation.

To edit to or from another VCR

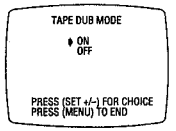
Your VCR can be used as either the recording deck or the source player when editing tapes.

PREPARATION

1 Connect the player's VIDEO OUT and AUDIO OUT connectors to the recorder's VIDEO IN and AUDIO IN connectors.
- If the player has an S VIDEO connector, connect it to the recorder's S VIDEO connector using the provided S-Video cable.
- When using your VCR as a recorder and connecting it to a monaural deck, connect that deck's AUDIO OUT connector to your VCR's AUDIO IN L connector.

OPERATION

2 Press MENU, SET, and SELECT as many times as necessary to access the "TAPE DUB MODE" screen. (☞ p. 7)
3 Press SET to choose "ON".
4 Press MENU as many times as necessary to exit.
5 Set the recorder's input mode to AUX.
- With this VCR model, press the digit key "0". "AU" will appear instead of a channel number.



FOR INSERT EDITING

Insert editing replaces part of the recorded scene with new material. Both the picture and Hi-Fi audio soundtrack are replaced with new ones, while the normal audio soundtrack remains unchanged. **Use your VCR as the recording deck.**

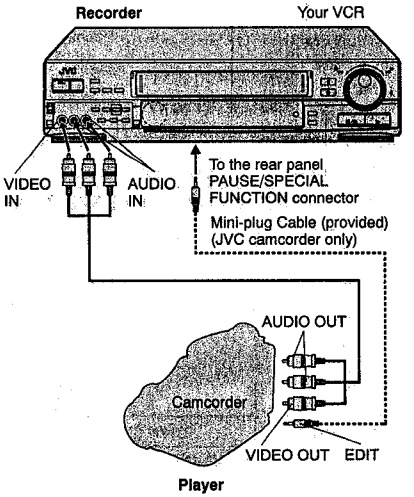
6 Load the source tape in the player, and the recording tape in your VCR.
7 Play back the recording tape and engage the Still mode at the edit-in point (the beginning of the segment to be replaced).
8 Press INSERT.
- Your VCR enters the Insert-Pause mode. (REC, PLAY and PAUSE light up on the FDP.)
- The TV screen changes from the still picture to the input signal you are going to record.

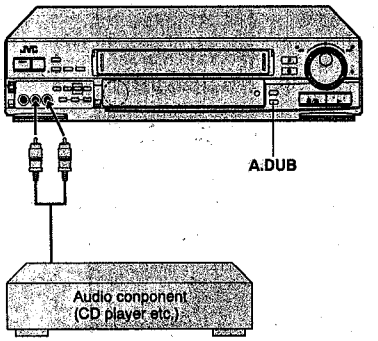
9 Play back the segment of the source tape to be inserted.
10 Press PLAY on the recorder.
- Insert editing will start. (PLAY and REC are displayed on the FDP.)

11 Press PAUSE on the recorder to stop insert editing.
- Do not press STOP to stop insert editing, otherwise the picture will be distorted at the switching point between the newly inserted and previously recorded pictures.

FOR AV INSERT EDITING

If you want to replace the picture, Hi-Fi audio soundtrack and normal audio soundtrack all at the same time...
In step 8 above, after you press INSERT, press A. DUB. also.
(REC and PLAY blink and PAUSE lights up on the FDP.)





NOTES:

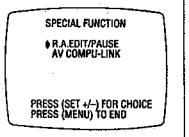
- After audio dubbing, the normal audio track remains selected. To hear the Hi-Fi tracks, select "Hi-Fi" ☞ p.20.
- Audio dubbing is possible using the rear connectors.
- Audio dubbing will stop automatically at the counter reading of "0:00:00", and the recorder will enter the Play mode. Check the counter before starting audio dubbing.
- It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

To edit from a camcorder

Tape-to-tape editing is also possible using a camcorder (equipped with playback facility) as the player and your VCR as the recorder.

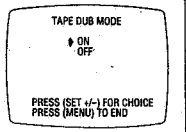
PREPARATION

1 Connect the camcorder's VIDEO OUT and AUDIO OUT connectors to the VCR's front panel VIDEO IN and AUDIO IN connectors.
- Use the L connector for monaural connection.
- When a Master Edit Control-equipped JVC camcorder is used, the camcorder is capable of controlling your VCR.
  ① Press MENU, SET, and SELECT as many times as necessary to access the SPECIAL FUNCTION screen. (☞ p. 7)
  ② Press SET to choose "R.A.EDIT/PAUSE".
  ③ Press MENU as many times as necessary to exit.
  ● Refer to camcorder's instruction manual for set-up procedure.



OPERATION

2 Press MENU, SET and SELECT as many times as necessary to access the "TAPE DUB MODE" screen. (☞ p. 7)
3 Press SET to choose "ON".
4 Press MENU as many times as necessary to exit.
5 Set the VCR's input mode to AUX by pressing digit key "0". "AU" will appear instead of a channel number.
6 Put the camcorder in the Play mode.
7 Put the VCR in the Record mode.
- Refer to the camcorder/recorder's instruction manual for operation instructions.



Audio Dubbing

Audio Dubbing replaces the normal audio sound of a previously recorded tape with a new soundtrack.

PREPARATION

1 Connect an audio component to the recorder's front panel AUDIO L, R connectors. (For monaural equipment, use the L connector.)

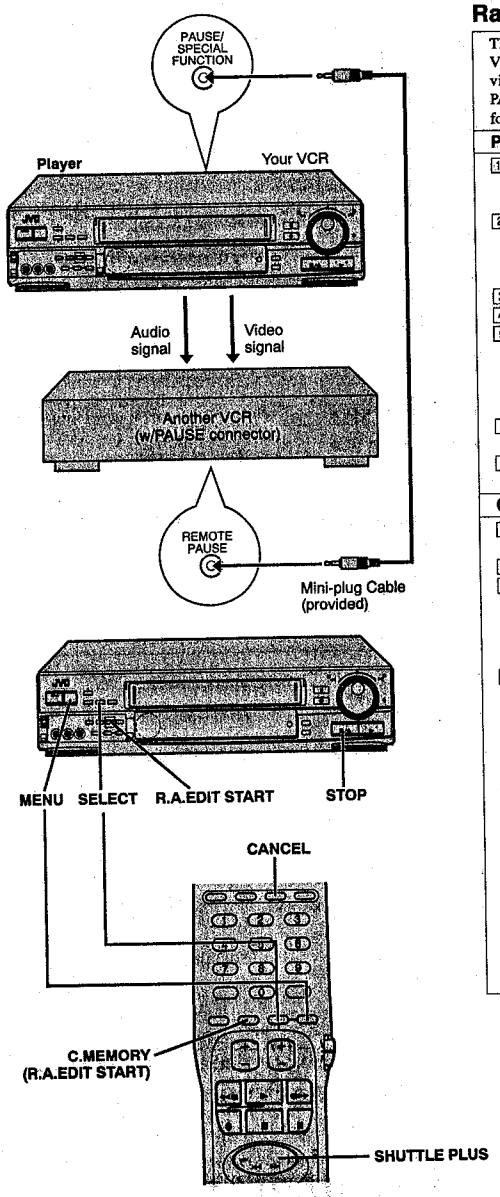
OPERATION

2 Set the VCR's input mode to AUX by pressing digit key "0". "AU" will appear instead of channel number.
3 Start playback and engage the Still mode at the point from which you wish to start audio dubbing.
4 Press A. DUB.
- Your VCR enters the Audio Dubbing-Pause mode. (REC blinks, PLAY and PAUSE light up on the FDP.)

5 Start playback of the audio source, and then press PLAY.
- Audio dubbing will start. (REC blinks and PLAY is displayed on the FDP.)

6 Pressing PAUSE temporarily stops audio dubbing.
7 Press STOP to stop audio dubbing.

Editing (cont'd)

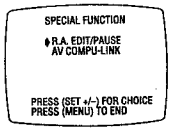


Random Assemble Editing

This function makes it easier to create edited videos when your VCR is used as the source player in combination with another video deck which is equipped with a PAUSE (i.e. REMOTE PAUSE) terminal. You can pre-program up to 8 scenes or "cuts" for automatic editing in the sequence you have specified.

PREPARATION

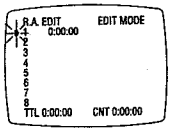
1. Connect your VCR's VIDEO OUT and AUDIO OUT connectors to the recording deck's VIDEO IN and AUDIO IN connectors.
2. Connect your VCR's PAUSE/SPECIAL FUNCTION connector to the recording deck's PAUSE connector.
   - If the recording deck does not have a PAUSE connector, connect to the R.A. EDIT connector.
3. Turn both units on.
4. Engage the recorder's AUX(iliary) mode.
5. Press MENU, SET, and SELECT as many times as necessary to access the SPECIAL FUNCTION screen. (☞ p. 7)



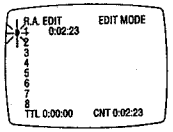
6. Press SET to choose "R.A. EDIT/PAUSE".
7. Press MENU as many times as necessary to exit.

OPERATION

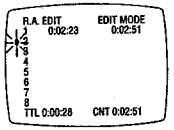
8. Insert a recorded cassette into your VCR.
9. Play back the tape in your VCR.
10. Press MENU, SET and SELECT as many times as necessary to access the R.A. EDIT screen.
    - The screen is superimposed on the video playback.



11. Use the SHUTTLE PLUS button to search for the point where you want an edited scene to start, and press SELECT.
    - The cut-in point is registered in memory.



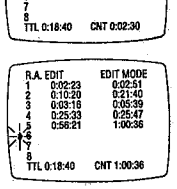
12. Use the SHUTTLE PLUS button to search for the point where you want the scene to end, and press SELECT.
    - The cut-out point is registered in memory.
    - The "TTL" reading displays the total running time of the edited scenes.



13. Specify additional scenes by repeating steps 11 – 12.

(Continued on next page.)

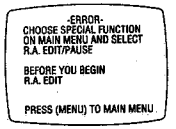
14. Insert a cassette (with safety tab intact) into the recording deck, and put the recording deck in the Record-Pause mode.
15. Press R.A.EDIT START.
    - The function begins automatic editing; all the specified scenes are copied to the recording deck in sequential order.
    - The on-screen display remains superimposed while your VCR searches for each scene (the blinking cursor points to the scene number presently being searched), and is not displayed while the scenes are being edited.



    - While a scene is being searched, the recording deck automatically enters the Record-Pause mode. "SEARCHING" appears on the screen.
    - When Random Assemble Editing is finished, your VCR enters the Still mode, the recording deck enters the Record-Pause mode, and the cursor blinks at the next available scene number.
16. Press MENU as many times as necessary to exit.
17. Press STOP on both decks to end Random Assemble Editing.

"ERROR" WARNING

If you choose "AV COMPU-LINK" by mistake in step 6 and then reach the R.A. EDIT screen in step 10, the "ERROR" display will appear as shown on the right.



Be sure to choose "R.A. EDIT/PAUSE" in step 6 to perform Random Assemble Editing.

OPTIONAL RM-V403U MULTI-BRAND R.A.EDIT CONTROLLER

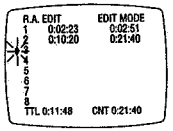
By connecting this controller to your VCR's R.A.EDIT Connector, Random Assemble Editing will become possible in conjunction with a second non-JVC VCR. The controller is compatible with various major VCR brands — convenient especially if you already own a VCR other than JVC. For compatible systems and availability, please consult your JVC dealer.

NOTE:

You can also monitor the sound when searching for scenes you want to edit in steps 11 – 12.
Since you can hear the soundtrack during selection, you can avoid abrupt or unnatural sounding scene-to-scene connections.

TO MAKE CORRECTIONS

During step 11 or 12, you can correct a cut-in or cut-out point using the remote control. Each time the CANCEL button is pressed, the immediately preceding point is cleared and can be reset.

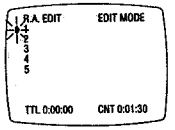


- Example: The cut-out point for "2" can be changed by pressing CANCEL once (to clear it) and re-setting it. By pressing CANCEL more times, you can back up to previous points for re-setting, but all points in between will be cleared in the process. (e.g. To reach the cut-out point for "1", the cut-in and -out points for "2" will be cleared.)

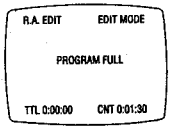
MEMORY CAPACITY

Random Assemble Editing utilizes the same memory space as the VCR's timer; so the number of sequences available to this function may not be 8, depending on how many programs are already stored in memory.

- Example: Only sequences 1 – 5 are available because three programs are stored in the timer memory.



- Example: The "PROGRAM FULL" screen appears when the timer memory is full (all 8 programs are used). To cancel a program, ☞ p. 32.



USING INDEX SEARCH WITH RANDOM ASSEMBLE EDITING

In step 11, Index Search can also be used to locate your edit points. When used, "INDEX" and the index number will appear on the R.A.Edit screen. For Index Search ☞ p. 22.

- Using Index Search during R.A.Edit will result in a reduction in accuracy.
- This function requires that index marks are previously recorded on your tape at the desired edit points.

? If You Have Any Questions

Before requesting service...

Power or Tape Transport Problems?

Symptoms	Check points
No power is applied to the VCR.	■ Is the power cord disconnected? — Connect it.
Remote control does not function.	■ Are the batteries discharged? — Replace with new ones. ■ Is the A/B code switch set to the appropriate position? ■ Is the TV/CABLE/VCR switch set to the appropriate position? — Check once again.
Clock is functioning properly, but the VCR cannot be powered.	■ Is "TIMER" displayed on the display panel? — Press the TIMER button to extinguish the display.
Cassette will not load. Gets stuck and is ejected a few seconds later.	■ Are you inserting the cassette correctly? Incorrect insertion causes the built-in safety mechanism to automatically eject the cassette. — Wait a few seconds and re-insert correctly. — Be sure to push the middle of the cassette's label side and be sure the window side is up.
Tape stops during rewind or fast-forward.	■ Is the C. MEMORY button pressed? — Press again to make "M" disappear from the counter display.
Tape will not rewind or fast-forward.	■ Is the tape already fully rewound or fast-forwarded? — Check the cassette.

Playback Problems?

Symptoms	Check points
Playback picture does not appear while the tape is running.	■ If you are using RF OUT connection, is the TV receiver's channel selector set to the correct video channel? — Set it to the RF converter channel (3 or 4). (☞ p. 8) ■ If you are using AV connection, is the TV receiver set to the AV mode? — Set it to the AV mode.
Noise appears during visual search.	■ This is normal.
Noise appears during normal playback.	■ Is the automatic tracking mode engaged? — Try manual tracking. (☞ p. 19)
Noise appears during slow playback.	■ Try manual tracking. (☞ p. 19)
Playback picture is blurred or interrupted while TV broadcasts are clear.	■ Video heads may be dirty. — Head cleaning is necessary. Consult your JVC dealer (☞ p. 41).
Breaks are noticeable in Hi-Fi audio sound.	■ Is the automatic tracking mode engaged? — Try manual tracking. (☞ p. 19).
Hi-Fi soundtrack cannot be heard.	■ Is "AUDIO MONITOR" on the FUNCTION menu set to "NORM"? — Set it to "HI-FI" (☞ p. 20). ■ Is Hi-Fi audio present on the tape?

Recording Problems?

Symptoms	Check points
Recording cannot be started.	■ Is a cassette loaded? ■ Is the safety tab on the cassette removed? — Cover with adhesive tape. (☞ p. 26)
TV broadcasts cannot be recorded.	■ Has "AUX" been selected by mistake? — Set to the desired channel.
Tape-to-tape editing is not possible.	■ Is the camcorder or VCR correctly connected? ■ Are all necessary power switches turned ON? ■ Has "AUX" been selected? — Set to "AUX". — If using a rear panel input connection, make sure nothing is connected to the front panel connectors. (☞ p. 34)
Camera recording is not possible.	■ Is the camcorder correctly connected? ■ Has "AUX" been selected? — Set to "AUX".

Timer-Recording Problems?

Symptoms	Check points
Timer recording is not possible.	■ Have you set the clock correctly and programmed the timer correctly? — Check once again. ■ Have you set-up the VCR? Make sure you have... — Set the VCR's tuner. — Made necessary changes in the Guide Channel Set screen. ■ Is the TIMER indicator displayed on the display panel? — If not, press the TIMER button to display the TIMER indicator.
Cable channels are not automatically switched during timer-recording.	■ Make sure that... — The Cable Box Controller is connected to your VCR's CABLE BOX Connector (☞ p. 14). — The correct Cable Box output channel selected in the CABLE BOX OUTPUT menu (☞ p. 15). — The Cable Box's power is left ON during timer-recording. ■ Although the provided Cable Box Controller is compatible with many different cable box brands, it is possible that it will not work with your cable box.
Timer recording takes place, but the channel is always wrong.	■ Is CABLE BOX OUTPUT menu set to "ON" even though you don't use an external Cable Box? — If you don't use a Cable Box, set CABLE BOX OUTPUT menu to "OFF". (☞ p. 15).
We moved, and now VCR Plus+ doesn't work properly.	■ TV stations differ by locale. It may be necessary to re-set the VCR.(☞ p. 17).
"PROGRAM FULL" is displayed on the VCR Plus+ input screen.	■ The VCR's timer memory if full; all 8 programs are used. — Cancel any unnecessary programs in the timer memory (☞ p. 32).
Timer programming screen does not function properly.	■ Is the ITR indicator displayed on the display panel? — Timer programming is not possible while an ITR is in progress.
"TIMER" and "📼" on the display panel continue blinking.	■ There is no cassette in the VCR. — Insert a cassette with the safety tab intact.
The cassette is automatically ejected. "TIMER" and "📼" continue blinking.	■ The inserted cassette has its safety tab removed. — Insert a cassette with its safety tab intact. Or cover the safety tab hole of the cassette with adhesive tape and re-insert it (☞ p. 26).
"TIMER" blinks for 10 seconds and the timer mode is cancelled.	■ There are no preset programs in memory, or they have all been incorrectly preset. — Check the programmed data and re-program it as necessary. Press TIMER again.
The cassette is ejected, power is shut off and "TIMER" and "📼" are blinking.	■ This means that the end of the tape was reached while timer-recording was in progress. Therefore, the preset program may not be recorded in its entirety.

Other Problems?

Symptoms	Check points
Some channels are skipped over when scanning channels.	■ Those channels are preset to be skipped over. If you need them, restore them. (☞ p. 13)
Channel cannot be changed.	■ Is recording in progress? — Press the PAUSE button, change the channel, and press the PLAY button.
Snowy picture on screen when viewing TV programs while recording another program.	■ Is the VIDEO indicator lit? — Press the TV/VIDEO button.
Remote control does not operate my TV.	■ Although the provided remote control unit is compatible with JVC televisions as well as many TV models manufactured by others, it is possible that the provided remote control will not operate your TV, or in some instances, will have limited function capability. (☞ p. 33) ■ Is the remote control's TV/CABLE/VCR switch set to "TV"? — If not, set it to "TV".
"12:00 AM" is blinking.	■ This means the clock must be set. It's displayed when time-keeping is terminated due to a power failure or because the VCR's power plug was pulled from the AC outlet. To set the clock. ☞ p. 11. If power was interrupted, it's also likely that all preset timer programming data has been erased. Please check and re-program as necessary.

ATTENTION:
This recorder contains microcomputers. External electronic noise or interference could cause malfunctioning. In such cases, switch the power off and unplug the power cord. Then plug it in again and switch power on. Take out the cassette. After checking the cassette, operate the unit as usual.

? If You Have Any Questions (cont'd)

Notes regarding...

Tuner Set

- Since receivable channels differ by locale, it will be necessary to reset your VCR's channels when you move to another location. Auto Channel Set is the easiest way to do this. ☞ p. 12

Playback

- If the end of the tape is reached during play or search, it is automatically rewound to the beginning and stops.
- The VCR automatically stops when still continues for more than 5 minutes.
- If the still picture is unstable, use the VCR's CH –/+ buttons to correct the picture.
- During search playback, some noise bars will appear.
- If noise bars appear during playback or slow motion, correct using manual tracking. ☞ p. 19.
- There is no audio during search, slow, still, or frame-by-frame playback.
- When playing back LP recordings during search, still or frame-by-frame playback, the picture will be distorted, and there may be a loss of color.
- When a tape is first inserted, the recorder enters the automatic tracking mode automatically.
- During multi-speed search, some noise bars will appear.
- You do not have to set to NORM when playing back tapes with normal sound track only.
- When MIX is selected, both "Hi-Fi" and "NORM" appear on the TV screen when the OSD button is pressed.

Recording

- To start recording with the VCR's Record button, press it once on its own. Pressing Record more than once activates Instant Timer Recording. ☞ p. 26.
- After pause, when recording is resumed, a few frames recorded before the pause may be overlapped by the new recording. This is meant to reduce picture distortion and is not a malfunction.
- The VCR automatically stops when record-pause continues for more than 5 minutes.
- If the end of the tape is reached while recording, it is automatically rewound to the beginning and stops.
- If the Record button does not work, check to see if the cassette's safety tab has been removed.
- The channel cannot be changed while recording is in progress. To change the channel, press Pause, then change the channel.
- The Remaining Tape Time is calculated based on the tape speed (SP or EP) being used. The indicated remaining time is only an estimate. Near the beginning of the tape, this estimate may be inaccurate. However, as the tape is used and the amount of remaining tape decreases, the estimation becomes more accurate.

Timer-Recording

- When timer-recording is successfully completed, the VCR power is automatically switched off.
- If the end of tape is reached while timer-recording, the cassette is automatically ejected.
- Since the timer starts and stops recording based on the time being kept by the VCR's built-in clock, the clock's time must be accurate for correct timer-recording results.
- When you program the timer while viewing a program or a tape, the TV screen will show the on-screen menu but the audio will continue to be heard.
- You can also program the timer while the VCR is recording; the on-screen menu will not be recorded on tape.
- Although the provided Cable Box Controller is compatible with many different cable box brands, it is possible that it will not work with your cable box.

Remote TV Operation

- Whenever you replace batteries in the remote control, it is necessary to reset the TV code if your television is not a JVC TV.
- With some televisions, the TV/VIDEO button functions only to switch the TV to the VIDEO(AV) mode.
- Although the provided remote control unit is compatible with JVC televisions as well as many TV models manufactured by others, it is possible that the provided remote control will not work with your TV.

Remote Cable Box Operation

- Whenever you replace batteries in the remote control, it is necessary to reset the Cable Box code.
- Although the provided remote control unit is compatible with many different Cable Box brands, it is possible that the provided remote control will not work with your Cable Box.

Editing

- Connections made to the front panel VIDEO and AUDIO inuts automatically override any rear panel VIDEO/AUDIO input connections. If you wish to edit with another machine connected to the rear input connectors, make sure that there is nothing connected to the front connectors.
- If connections are made to both the front VIDEO and S-VHS connectors, the S-VHS connection has priority.

Insert Editing

- To stop insert editing automatically, first determine the edit-out point on the recording tape (the end of the segment to be replaced) and press the remote control's C.RESET button. Then follow steps 8 through 11 in "Insert Editing" (☞ p.34); insert editing will stop automatically at the counter reading of 0:00:00.
- Insert editing cannot be started from a non-recorded segment.
- A small portion of the recording which precedes an insert edit may become erased.
- Video or audio insert cannot be performed if the safety tab is absent.
- Video or audio insert cannot be performed on a tape recorded at LP speed.
- Distortion may occur in the inserted video if the recording tape had discontinuous video or video recorded at different speeds.

Audio Dubbing

- When monitoring the sound during Audio Dubbing, the normal soundtrack will be automatically selected. If you wish to hear the mixed sound (Hi-Fi + normal soundtracks), ☞ p. 20.
- Audio dubbing is not possible with cassettes whose safety tab is absent.

Random Assemble Editing

- When editing, there may be a discrepancy of about 2 seconds on the playback tape between the locations you choose as cut-in/out points and the locations the VCR recognizes as those points.
- For any scene, the cut-out point must have a counter reading that is at least 1 second after the cut-in point. A cut-out point with a counter reading less than or the same as the cut-in point will not be registered.
- Since the playback deck prerolls during Random Assemble Editing, there must be at least 15 seconds worth of recorded material prior to any cut-in point on the playback tape.
- If the search time for a cut-in point exceeds 5 minutes, the recording deck's Record-Pause mode will be cancelled and editing will not take place.
- R.A.Edit is also possible with another JVC VCR which doesn't have a PAUSE terminal but does have an R.A.EDIT connector. In this case, connect both VCRs by their R.A.EDIT connectors.

Precautions

Please follow these safety precautions. Not doing so may result in damage to the VCR, remote control, or video cassette.

- **Avoid extreme heat and direct sunlight.**
- **Avoid extreme cold.**
- **Avoid extreme humidity.**
- **Avoid dust.**
- **Avoid places subject to vibrations.**
- **Avoid strong magnetic fields.**
- **Do not block the VCR's ventilation openings.**
- **Do not place anything heavy on the VCR or remote control.**
- **Do not place anything which might spill on top of the VCR or remote control.**
- **Do not place the VCR on cushions, pillows, or thick carpeting.**
- **Use the VCR in a stable, horizontal position only.**

Beware of moisture condensation

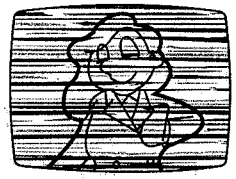
Moisture in the air will condense on the VCR when you move it from a cold place to a warm place, or under extremely humid conditions — just as water droplets form on the surface of a glass filled with cold liquid. Moisture condensation on the head drum will cause damage to the tape. In conditions where condensation may occur, keep the VCR's power turned on for a few hours to let the moisture dry.

When transporting

- Be sure to remove cassette from VCR before packing.
- Avoid violent shocks to the VCR during packing and transport.

Place cassettes in cassette cases and store vertically.

About head cleaning



Accumulation of dirt and other particles on the video heads may cause the playback picture to become blurred or interrupted. Although this model is equipped with a built-in head cleaner which automatically cleans the heads, reducing the likelihood of dirty heads, if such troubles are encountered please consult the nearest JVC dealer.

Auto Head Cleaner

A built-in head cleaner automatically cleans the video heads and head drum whenever a tape is loaded or unloaded to reduce head clogging.

Specifications

GENERAL

Power requirement		: AC 120 V∿, 60 Hz
Power consumption		: 26 W
Temperature		
Operating		: 5°C to 40°C (41°F to 104°F)
Storage		: –20°C to 60°C (–4°F to 140°F)
Operating position		: Horizontal only
Dimensions (WxHxD)		: 400 x 94 x 340 mm (15-3/4" x 3-3/4" x 13-7/16")
Weight		: 4.5 kg (10.0 lbs)
Format		: S-VHS/VHS NTSC standard with Hi-Fi audio
Maximum recording time	(SP)	: 160 min. with T-160 video cassette
	(EP)	: 480 min. with T-160 video cassette

VIDEO/AUDIO

Signal system	: NTSC-type color signal and EIA monochrome signal, 525 lines/60 fields
Recording/Playback system	: DA-4 (Double Azimuth) head helical scan system
Signal-to-noise ratio	: 45 dB
Horizontal resolution	: 400 lines (S-VHS) 240 lines (VHS)
Frequency range	: 70 Hz to 10,000 Hz (Normal audio) 20 Hz to 20,000 Hz (Hi-Fi audio)
Input/Output	: RCA connectors (IN x 2, OUT x 1)

TUNER

Tuning system		: Frequency synthesized tuner
Channel coverage		
	(VHF)	: Channels 2–13
	(UHF)	: Channels 14–69
	(CATV)	: 113 Channels
RF output		: Channel 3 or 4 (switchable; preset to Channel 3 when shipped) 75 ohms, unbalanced

TIMER

Clock reference	: Quartz
Program capacity	: 1-year programmable timer/ 8-programs
Memory backup time	: Approx. 60 min.

ACCESSORIES

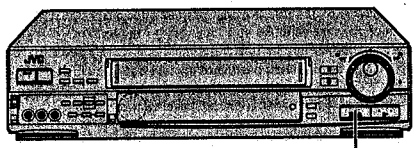
Provided accessories	: RF cable (F-type), Infrared remote control unit, "AAA" battery x 2, Cable Box Controller, S-Video cable (4-pin), Audio/Video cable, Mini-plug cable

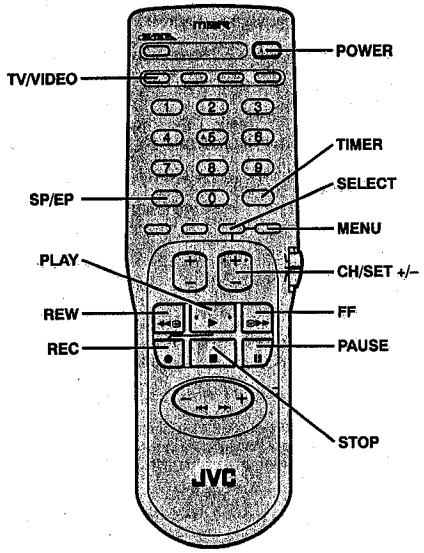
Specifications shown are for SP mode unless otherwise specified.
E. & O.E. Design and specifications subject to change without notice.

Operaciones básicas en español

Para las conexiones VCR-TV vea la hoja de la "Guía básica para las conexiones del VCR" adjunta a este manual de instrucciones.

ENCIENDA;
SELECCIONE EL CANAL
3 O 4 (O MODO AV)





Disposición básica

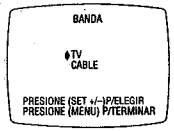
Ajuste del reloj de su VCR y de la lengua para indicación en pantalla

1. Presione POWER para encender el VCR.
2. Presione TV/VIDEO para que aparezca "TV" del display del VCR.
3. Presione MENU.
4. Presione SET +/– para seleccionar "AJUSTE INICIAL", y luego presione SELECT.
5. Presione REW para seleccionar "ESPAÑOL" para indicación en pantalla.
6. Presione SET +/– para fijar el mes y luego presione SELECT.
7. Repita el paso 6 para ajustar el día, el año y la hora.

8. Presione MENU para comenzar de funcionamiento del reloj.

Asignación de canales al sintonizador de su VCR

1. Presione POWER para encender el VCR.
2. Presione TV/VIDEO para que aparezca "TV" del display del VCR.
3. Presione MENU.
4. Presione SET +/– para seleccionar "AJUSTE DE SINTONIZADOR", y luego presione SELECT.



5. Presione SET +/– para seleccionar "BANDA", y luego presione SELECT.
6. Presione SET +/– para seleccionar "TV" o "CABLE".
   - Ajústelo en TV si su antena recibe sólo canales de UHF y VHF. Ajústelo en CABLE si su sistema de antena es una línea de TV por cable.
7. Presione MENU.
8. Presione SET +/– para seleccionar "AJUSTE AUTO DE CANAL", y luego presione SELECT.
   - Se inicia la sintonización automática de canales y después de completada la misma aparecerá en la pantalla el mensaje "FIN DE EXPLORACION".

9. Presione MENU tantas veces como sea necesario.

Reproducción básica

Preparación

- Encienda el televisor.
- Seleccione el canal 3 o 4 (o modo AV).

1. Inserte un cassette.
   - El VCR se encenderá automáticamente y el contador se reposicionará a 0:00:00.
   - Si el cassette no tuviera lengüeta de seguridad, comenzará automáticamente la reproducción.
2. Presione PLAY para iniciar la reproducción.
3. Presione STOP para detener la reproducción.
   - Para rebobinar la cinta, presione REW.
   - Para avanzar rápidamente la cinta, presione FF.
   - Para detener el rebobinado o bobinado rápido, presione STOP.
4. Presione STOP/EJECT en el VCR para expulsar el cassette.

Grabación básica

Preparación

- Encienda el televisor.
- Seleccione el canal 3 o 4 (o modo AV).

1. Inserte un cassette con lengüeta de seguridad.
   - El VCR se encenderá automáticamente y el contador se reposicionará a 0:00:00.
2. Presione CH +/– (o las teclas numéricas y luego ENTER) para seleccionar el canal que desea grabar.
3. Presione SP/EP para cambiar la velocidad de cinta.
4. Presione simultáneamente REC y PLAY para comenzar la grabación.
   - Para efectuar una pausa de grabación, presione PAUSE.
   - Para continuar con la grabación, pesione PLAY.
5. Presione STOP para detener la grabación.

Para mirar un programa mientras graba otro

Durante la grabación...

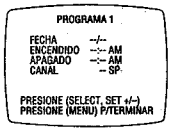
1. Presione TV/VIDEO para que aparezca "VIDEO" del display del VCR.
   - La teledifusión que se está grabando desaparecerán.
2. Utilice los controles de canales del televisor para elegir otro canal que desee ver.
   - El programa seleccionado con los controles de canales de TV aparecerá en la pantalla del televisor mientras el programa seleccionado con los controles de canales del VCR se grabará en la cinta.

Grabación por temporizador

Preparación

- Encienda el televisor.
- Seleccione el canal 3 o 4 (o modo AV).

1. Inserte un cassette con lengüeta de seguridad.
   - El VCR se encenderá automáticamente y el contador se reposicionará a 0:00:00.
2. Presione dos veces MENU, y luego presione SELECT.
   - Aparecerá el menú "PROGRAMA".



3. Presione SET +/– para seleccionar un número de programa vacante, y luego presione SELECT.
   - Inicialmente todos los programas están vacantes y el cursor está en el programa 1. Por lo tanto, presione simplemente SELECT.
4. Presione SET +/- para fijar el mes y luego presione SELECT.
5. Presione SET +/- para fijar el día del mes.
   - Para grabar un programa diario (lunes – viernes), presione DAILY (tecla 8). Para grabar un programa semanal, presione WEEKLY (tecla 9).
6. Presione SELECT.
7. Repita el paso 4 para fijar la hora de inicio, la hora de finalización, el número de canal y la velocidad de cinta.

8. Presione MENU tantas veces como sea necesario.
9. Presione TIMER.
   - El VCR se establecerá en el modo de grabación programada y se apagará.

For Servicing

HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE: 1-800-252-5722

Dear customer:
In order to receive the most satisfaction from your purchase, read the instruction booklet before operating the unit. In the event that repair is necessary, or for the address nearest your location, please refer to the factory service center list below or within the Continental United States, call 1-800-252-5722 for your authorized servicer. Remember to retain your Bill of Sale for Warranty Service.

— JVC

JVC SERVICE & ENGINEERING COMPANY OF AMERICA
DIVISION OF US JVC CORP.

FACTORY SERVICE CENTER LOCATIONS

107 Little Falls Road
Fairfield, NJ 07004-2105
(201) 808-9279

1500 Lakes Parkway
Lawrenceville, GA 30243-5357
(404) 339-2522

705 Enterprise Street
Aurora, IL 60504-8149
(708) 851-7855

5665 Corporate Avenue
Cypress, CA 90630-0024
(714) 229-8011

10700 Hammerly, Suite 110
Houston, TX 77043-2310
(713) 935-9331

2969 Mapunapuna Place
Honolulu, HI 96819-2040
(808) 833-5828

230 Eliot Street
Ashland, MA 01721-2377
(508) 881-5923

14505 Commerce Way
Miami Lakes, FL 33016-1512
(305) 362-6252

890 Dubuque Avenue
South San Francisco, CA 94080-1804
(415) 871-2666

Sophisticated electronic products may require occasional service. Just as quality is a keyword in the engineering and production of the wide array of JVC products, service is the key to maintaining the high level performance for which JVC is world famous. The JVC service and engineering organization stands behind our products.

NATIONAL HEADQUARTERS
JVC SERVICE & ENGINEERING COMPANY OF AMERICA
DIVISION OF US JVC CORP.
107 Little Falls Road
Fairfield, NJ 07004-2105

If you ship the product...

Pack your JVC unit in the original carton or one of equivalent size and strength. Enclose, with the unit, a letter stating the problem or symptom that exists and also a copy of the receipt or bill of sale you received when you purchased your JVC unit. Print your home return address on the outside and the inside of the carton. Send to the appropriate JVC Factory Service Center as listed above.

Don't service it yourself.

CAUTION
To prevent electrical shock, do not open the cabinet.
No user serviceable parts inside.
Refer servicing to qualified service personnel.

ACCESSORIES

To purchase accessories for your JVC product, you may contact your local JVC Dealer.
Or from the 48 Continental United States call toll free: 1-800-882-2345.

Warranty

LIMITED WARRANTY **CONSUMER VIDEO 1-90**

JVC COMPANY OF AMERICA warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL PURCHASER AT RETAIL to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original retail purchase for the period as shown below. ("The Warranty Period")

PARTS	LABOR
1 YR	90 DAYS

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:
If this product is found to be defective, JVC will repair or replace defective parts at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products and parts thereof may be brought to a JVC authorized service center on a carry-in basis except for Television sets having a screen size 25 inches and above which are covered on an in-home basis.

WHAT YOU MUST DO FOR WARRANTY SERVICE:
Return your product to a JVC authorized service center with a copy of your bill of sale. For your nearest JVC authorized service center, please call toll free: (800) 252-5722.

If service is not available locally, box the product carefully, preferably in the original carton, and ship, insured, with a copy of your bill of sale plus a letter of explanation of the problem to the nearest JVC Factory Service Center, the name and location of which will be given to you by the toll-free number.

If you have any questions concerning your JVC Product, please contact our Customer Relations Department.

WHAT IS NOT COVERED:
This limited warranty provided by JVC does not cover:
1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
2. Initial installation and installation and removal for repair;
3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
5. Signal reception problems and failures due to line power surge;
6. Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase;
7. Accessories;
8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);from the date of purchase);

There are no other express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR THE LOSS OF USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

JVC COMPANY OF AMERICA
DIVISION OF US JVC CORP.
41 Slater Drive
Elmwood Park, New Jersey 07407

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY. THIS WARRANTY DOES NOT APPLY. FOR DETAILS OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:
Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.: _____ Serial No: _____

Purchase date: _____ Name of dealer: _____